

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[The MINING JOURNAL is Registered at the General Post Office as a Newspaper and for Transmission Abroad.]

No. 2448.—Vol. LII.

LONDON, SATURDAY, JULY 22, 1882.

[WITH SUPPLEMENT.] PRICE SIXPENCE. BY POST, £1 4s PER ANNUM.

M. R. JAMES H. CROFTS, STOCK AND SHARE BROKER AND MINING SHARE DEALER,
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.
ESTABLISHED 1842.

BUSINESS transacted in all descriptions of MINING Stocks and Shares (British and Foreign), Consols, Bonds, (Foreign and Colonial), Railways, Insurance, Assurance, Telegraph, Tramway, Shipping, Canal, Gas, Water, and Dock Shares, and all Miscellaneous Shares.
Business negotiated in Stocks and Shares not having a general market value.

Every Friday a general and reliable List issued (a copy of which will be forwarded on application), containing closing prices of the week.

MINES INSPECTED.

BANKERS: CITY BANK, LONDON—SOUTH CORNWALL BANK, ST. AUUSTEL.

SPECIAL DEALINGS in the following, or part—
50 Almada, 11s. 3d. 35 Hingston Down, 15s. 50 Potosi, 11s. 3d.
50 Bedford United, 37s. 6d. 50 Herodsfoot, 1s. 9d. 50 Parys Copper, 8s. 25 Bratsberg, 31s. 50 Hoover Hill, 4s. 6d. 100 Prince of Wales, 6s. 50 Carnarvon Cop., 10s. 100 Javali, 5s. 50 Panulicillo, £8 3s. 9d. 50 Callao Bis, 8s. 6d. 10 Kapanga, 16s. 100 Pestana, 4s. 9d. 50 Chile Gold, 13s. 9d. 20 Killifreth, 25%. 25 Ruby, £2 1s. 3d. 50 Consolidated, 5s. 70 La Plata, £2 1s. 3d. 40 Rhodes Reef, 16s. 50 Devrala Cen., 13s. 6d. 200 Langford, 6s. 20 Richmond, £2. 50 D'Essey Mount, 13s. 9d. 100 Last Chance, 10s. 10 Roman Grav., £8 13s. 9d. 50 Devon Con., 45%. 25 Leadhills, £2 8s. 9d. 20 Sierra Buttes, 30s. 50 Devon Friend., 4s. 6d. 50 Marke Valley, 10s. 25 S. Condurrow, £8 3s. 9d. 50 Don Pedro, 6s. 3d. 10 Mona. 50 So. Darren, 15s. 50 Drakewalls, 10s. 3d. 100 Mounts Bay, 8s. 6d. 25 S. E. Wynad, £3 3s. 9d. 50 East Blue Hills, 10s. 6d. 25 Morla Du, 5s. 40 So. Devon Unit., 20s. 6d. 50 East Glandon, 5s. 50 Mysoor Gold, 10s. 6d. 75 Sortridge, 4s. 6d. 50 E. Chiverton, 25s. 100 Mysoor Reef, 3s. 9d. 150 Simons Reef, 2s. 9d. 50 Tanker, Gt. Con., 5s. 3d. 50 East Lovell, 12s. 6d. 100 No. Herodsfoot, 4s. 50 Uni. Van Con., 7s. 6d. 50 E. Roman Grav., 6s. 9d. 20 Nouv. Monde, 7s. 3d. 50 West Devon, 7s. 6d. 50 English Australian Gold, 10s. 6d. 20 No. Penstrutial, 12s. 6d. 30 West Phoenix, 9s. 50 Frontino, £2 13s. 9d. 100 New W. Caradon, 3s. 3d. 50 West Caradon, 6s. 3d. 50 Glenrock, £1 6s. 3d. 50 Old Oylcombe, 2s. 6d. 50 West Oylcombe, 20s. 50 Glenroy, 5s. 50 Old Shepherds, 6s. 6d. 20 Wheel Crebor, £2 13s. 9d. 50 Gold Coast, 22s. 6d. 40 Organo. 10 West Kitty. 50 Wheel Jewell, 2s. 6d. 40 Gt. West Chiv., 2s. 6d. 60 Pandora. 25 Wheel Kitty, £1 2s. 6d. 50 Gwynwin, 10s. 50 Polrose. 50 Wheel Jewell, 2s. 6d. 50 Gwydyr Amal., off. w. 80 Port Phillip, 4s. 6d. 25 Wheel Kitty, £1 2s. 6d.
* * * SHARES SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MONTHS) ON DEPOSIT OF TWENTY PER CENT.
* * * SPECIAL BUSINESS at CLOSE PRICES in all Market TIN, COPPER and LEAD SHARES.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

ELECTRIC LIGHT SHARES—SPECIAL BUSINESS.
Shares sold for cash, account, or for forward delivery (one, two, or three months) on deposit of 20 per cent.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

RAILWAYS—FOREIGN BONDS—SPECIAL BUSINESS.
Fortnightly Accounts opened on receipt of the usual cover.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

AMERICAN AND CANADIAN STOCKS AND SHARES—SPECIAL BUSINESS.
Fortnightly Accounts opened on receipt of the usual cover.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

OPTIONS, SINGLE OR DOUBLE, dealt in at close market prices.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

INDIAN GOLD MINES.—SPECIAL BUSINESS in:—
Devala Moyer. Indian Phoenix. Rhodes Reef.
Devala Central. Indian East Kingdon. South-East Wynad.
Devala Consolidated. Indian Trevelyan. Tambacherry.
Indian Glenrock. Mysore. Wynad Perseverance.
At CLOSE MARKET PRICES, free of commission.
* * * Reliable information given on any of the above. A daily price list issued every closing quotations. SPECIAL BUSINESS in La Plata, Rio Tinto, Frontino and Bolivia, Potosi, Chile, Nouveau Monde, Ruby, Richmond.
* * * SHARES IN THE ABOVE INDIAN OR OTHER GOLD AND SILVER MINES SOLD FOR FORWARD DELIVERY ONE, TWO, OR THREE MONTHS ON DEPOSIT OF TWENTY PER CENT.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.
ESTABLISHED 1842.

M. R. W. H. BUMPUS, STOCK AND SHARE BROKER, AND MINING SHARE DEALER
44, THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1867.

BUSINESS transacted in STOCK EXCHANGE SECURITIES and MISCELLANEOUS SHARES of every description. RAILWAYS, BANKS, FOREIGN and COLONIAL BONDS, TRAMWAYS, TELEGRAPHS, and all the LEADING INVESTMENTS.

Accounts opened for the Fortnightly Settlement
A List of Investments free on application.
Mr. BUMPUS has SPECIAL BUSINESS in the undermentioned:—

50 Almada, 12s. 6d.	70 Goodveere, 22s. 6d.	30 Panulicillo, £6 3s. 9d.
100 Akankoo, 9s.	40 Hingston Down, 16s.	70 Prince of Wales, 6s.
70 Bratsberg, 31s. 6d.	100 Indian Trevelyan, 10s.	100 Rhodes Reef, 16s. 3d.
40 Bedford United, 37s. 6d.	100 Indian Glenrock, 10s.	50 Ruby (Old), £2 2s. 6d.
100 Callao Bis, 10s.	25s. 6d.	20 Richmond, 2s.
25 Cape Copper, £52.	100 Indian Phoenix, 27s. 3d.	50 Sortridge Copper, 4s. 9d.
25 Coplapo, £3 7s. 6d.	100 Indian Consolidated, 10s. 3d.	150 Tankerville, 5s. 3d.
50 Carn Brea, 10s.	250 Javali, 5s.	25 Trevaunance, £2 4s. 6d.
75 Colorado, 29s. 6d.	70 Kapanga, 16s.	5 West Kitty, £12.
50 Chile Gold, 13s. 6d.	100 La Plata, 42s.	70 W. Godolphin, £2.
100 Carn Camborne, 10s.	20 Mona, £4 3s. 9d.	50 Wheel Crebor, £2 7s. 6d.
50 Devala Provident, 2s. 6d.	100 Mona Consola, 10s.	50 Wheel Jewell, 2s. 6d.
50 Devon Friendship, 4s. 6d.	70 Mysoor Gold, 10s. 9d.	100 West Devon Consols, 7s. 6d.
100 Devala Moyer, 10s.	70 Mysoor Reef, 3s. 9d.	40 West Phoenix, 9s.
20 Devon Consols, £5 1s. 6d.	100 Michipicoten, 21s.	100 Wynad Perseverance, 22s. 6d.
70 Drakewalls, 10s. 3d.	50 New Trumpet, 21s.	50 Wheel Boys, 3s. 6d.
50 Eberhardt, 9s.	25 New Quebrada, £4 3s. 9d.	50 West Polbrean Tin, 10s.
50 East Blue Hills, 10s. 6d.	150 Oregum Gold, 6s.	50 West Polbrean Tin, 10s.
25 Frontino, £2 13s. 9d.	20 Oregum Gold, 6s.	
15 Great Holway, £5 1s. 6d.	100 Potosi, 11s. 3d.	
50 Gold Coast, £1 4s.		

SPECIAL BUSINESS, at close prices, in the SHARES of all the principal HOME and FOREIGN MINES.

IMPORTANT TO INVESTORS.—Shares in SOUND DIVIDEND and PROGRESSIVE MINES (particularly TIN and COPPER) should be bought at present prices, as many of them are likely to have a considerable rise within the next few months.

Mr. BUMPUS devotes special attention to these Securities, and is in a position to afford reliable information and advice to intending investors and others.

WHEAL GRENVILLE and WEST GODOLPHIN shares are recommended for investment at present prices.

WILLIAM HENRY BUMPUS, SWORN BROKER.
OFFICES: 44, THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1867.

JOSEPH TOMS, STOCK AND SHARE DEALER,
88, BISHOPSGATE STREET WITHIN.

ABBOTT, PAGE, AND CO., 42, POULTRY, LONDON, E.C.
Recommend at present prices a purchase in
EAST WYREAC ROSE. TRESAVEAN.
OLD SHEPHERDS. MOUNTS BAY.

Shares fully paid. No further liability.
Full particulars of Electric Light and other shares contained in our Circular, ready, and post free.

BRITISH AND FOREIGN MINING OFFICES.

Messrs. PETER WATSON AND CO.,
AUSTIN FRIARS,
OLD BROAD STREET, LONDON, E.C.
BANKERS: THE ALLIANCE BANK (Limited).

Messrs. PETER WATSON AND CO.'S
BRITISH AND FOREIGN MONTHLY MINING NEWS
—STOCK AND SHARE INVESTMENT NOTES—MINES,
MINERALS, AND METAL MARKETS—SHARE LIST,
No. 843, Vol. XVII., for JULY month, is now ready,
and will be sent to customers on application.

Annual Subscription..... 5s. | Single Copy..... 6d.

Messrs. PETER WATSON AND CO.,
18, AUSTIN FRIARS, E.C.

M. R. ALFRED E. COOKE,
DEALER in BRITISH AND FOREIGN STOCKS AND SHARES
of EVERY DESCRIPTION.
(FROM 75, OLD BROAD STREET)
ESTABLISHED 1853.
9, OLD BROAD STREET, LONDON.

STOCKS AND SHARES FOR SALE.

Mr. ALFRED E. COOKE can sell the following lots (or any smaller number of shares) to immediate applicants at prices annexed, free of commission.

Where prices are not inserted, the market price of the day will be taken, or offers may be made:—

20 Bratsberg Cop.	20 Indian Phoenix, 25s.	15 Richmond Silver.
22 Callao-Bis Gold, 9s.	30 Indian Consolidated, 16s. 9d.	20 Ruby, £1 1s.
50 Chile Gold.	10 La Plata Lead, £2 3s. 9d.	25 Rhodes Reef, 16s. 9d.
50 Devala Gold.	10 Leadhills, £2 3s. 9d.	10 South-East Wynad Gold, £3 3s. 9d.
40 Devon Friend., 5s.	30 Langford Silver, 7s.	50 Sortridge Copper and Tin, 4s. 9d.
80 Drakewalls Tin and Copper, 10s. 6d.	40 Mysore Gold.	50 Tanker, Gt. Con., 5s. 3d.
10 East Lovell Tin, 15s.	10 Michipicoten Copper, 2s. 6d.	30 Vase & Glyn Lead, 7s. 9d.
10 East Rose Lead, 5s.	15 New Kitty Tin, £2.	35 W. Crebor Copper, 14s.
50 East Blue Hills Tin, 9s. 6d.	20 New West Caradon Copper, 3s.	20 West Phoenix Tin and Copper, 12s. 6d.
35 Eng.-Australian Gold 10s.	50 No. Herodsfoot, 3s. 9d.	10 West Kitty Tin.
20 Frontino Gold, £2 16s. 3d.	50 Nouveau Monde Gold, 5s.	25 W. Polbrean Tin, 22s. 6d.
30 Gawton Copper, 9s. 6d.	50 Potol Gold.	15 Wheel Jane Tin.
10 Hoover Hill, 4s. 6d.	30 Pioneer Copper and Lead, 12s.	10 Wheel Agar Tin.
10 Indian Glenrock Gold £1 2s.	125 Prince of Wales Cop., 7s. 6d.	10 Wheel Crebor Copper, £2 3s. 9d.
50 Indian Trevelyan Gold, 16s.	25 Parys Copper, 8s.	45 W. Lisburne Lead, 20s.
		50 W. Devon Copper.

Many of the above shares can be sold for settlement by arrangement at the end of August account on payment of 20 per cent. deposit. Shares not found in the above list may be purchased on application.

SPECIAL NOTICE.—SHARES in all MINES and STOCKS and SECURITIES of EVERY DESCRIPTION can be supplied at LOWEST POSSIBLE NET PRICES for CASH, ACCOUNT, or FORWARD DELIVERY.

Mr. Alfred E. Cooke is buyer of shares in all the LEADING MINES at current market price.

PROFITABLE MINING INVESTMENTS.

Mr. ALFRED E. COOKE can supply SPECIAL LOTS of shares in amounts of £25, £50, £100, to £1000, which are likely to prove HIGHLY REMUNERATIVE to IMMEDIATE INVESTORS.

TELEGRAMS and LETTERS receive immediate attention. All shares currently dealt in, bought and sold, free of commission.

SPECULATIVE ACCOUNTS OPENED ON RECEIPT OF COVER.

SHARES BOUGHT AND SOLD AT CLOSEST NET PRICES.

ALFRED E. COOKE, 9, OLD BROAD STREET, LONDON.

(Opposite the Stock Exchange, with which the office is in DIRECT TELEGRAPHIC COMMUNICATION.)

M. R. JAMES STOCKER, STOCKBROKER,

2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

Has special business in the following for cash or settlement by arrangement:—

Almada.	Gold Coast.	Prince of Wales.
Akankoo.	Gawton.	Pioneer.
Bratsberg.	Hoover Hill.	Potosi.
Chile Gold.	Indian Glenrock.	Rhodes Reef.
Consolidated.	Indian Phoenix.	Ruby.
Consolidated Indian.	Kapanga.	Richmond.
Clitters.	La Plata.	Sortridge.
Callao Bis.	Leadhills.	So. East Wynad.
Don Pedro.	Last Chance.	Tankerville.
Devon Friendship.	Mona Consola.	Van.
Devala Moyer.	New Kitty.	West Crebor.
Devala Central.	Nouveau Monde.	West Devon.
Eberhardt.	Organo.	Wheel Crebor.
East Blue Hills.	Parys Corporation.	Yuba River.

BANKERS: LONDON AND WESTMINSTER.

JOHN B. REYNOLDS, STOCK AND SHARE DEALER,

37, WALBROOK, LONDON, E.C.

Established Twenty-five Years.

BANKERS: LONDON JOINT-STOCK, PRINCES-STREET.

Mr. REYNOLDS transacts business in all descriptions of Mining Property at net prices. He is in a position to obtain reliable information respecting mining shares, and advises upon such information on the receipt of a fee of 21s. He spares neither time nor expense in securing for his numerous correspondents opportunities for obtaining the best investments.

GRANVILLE SHARP, STOCK AND SHARE DEALER,

32, QUEEN VICTORIA STREET, LONDON, E.C.

Recommends the purchase of shares in the following:—

EAST CHIVERTON SILVER-LEAD MINE, and WHEAL JANE TIN MINE.

Full particulars on application.

BANKERS: LONDON AND WESTMINSTER, London, E.C.

FERDINAND R. KIRK, STOCKBROKER,

5, BIRCHIN-LANE, LONDON, E.C.

Fortnightly Accounts opened in all Stock Exchange Securities on receipt of the usual cover.

BANKERS: LONDON AND WESTMINSTER, Lothbury.

ABBOTT AND CO., STOCK AND SHARE BROKERS,

9, CORNHILL, LONDON, E.C.

WHEAL GEORGE shares should be bought now at PRESENT QUOTATIONS. The Extra Edition of July Circular posted on application.

NOTICE TO SHAREHOLDERS.

HERODSFOOT SILVER-LEAD MINE.—

WANTED TO PURCHASE, FIVE HUNDRED TO TWO THOUSAND SHARES FOR CASH. State Price.

Mr. A. DAVIDSON, Leadenhall House, 101, Leadenhall-street, London, E.C.

M. R. ALEXANDER DAVIDSON,

STOCK AND SHARE DEALER,

LEADENHALL HOUSE, 101, LEADENHALL STREET, LONDON, E.C.

FOR SALE, the following, or any part. OFFERS CAN BE MADE, or the LOWEST PRICES will be FORWARDED on application:—

*120 Bratsberg.	*150 Organo Gold.	170 Tankerville.
*370 Devon Friendship.	*200 Parys Mountain.	50 Van.
*240 East Blue Hills.	110 Prince of Wales.	*110 West Crebor.
300 La Plata.	75 Richmond.	120 West Caradon.
*200 Michipicoten, 19s.	40 Roman Gravel.	210 West Devon.
*25 Mona, £4 11s. 3d.	400 Sortridge.	*100 West Phoenix.
	60 Tamar Silver-Lead.	

* THESE ARE CHEAP SHARES, WORTH BUYING FOR A GOOD RISE. All these Mines are looking well, and at present prices shares should be bought. Buyers should first ascertain my price before going elsewhere.

THE
"DIFFERENTIAL"
PUMPING ENGINE
(DAVEY'S PATENT),
FOR

DRAINING MINES, WATER SUPPLY OF TOWNS, IRRIGATION,
SUPPLYING DOCKS, PUMPING SEWAGE, and GENERAL
PUMPING PURPOSES.

HATHORN, DAVEY, AND CO.,
LEEDS.

HATHORN, DAVEY, and Co. have Patterns of "Differential" Engines of all sizes, from 5 to 500-horse power, and have facilities for supplying very power ful Engines and Pumps at a short notice.

M. R. CHARLES THOMAS,
MINING AGENT, STOCK AND SHARE DEALER,
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M. R. ALFRED THOMAS,
MINING AGENT, AND STOCK AND SHARE DEALER,
10, COLEMAN STREET, LONDON, E.C.

ESTABLISHED 1852.

HENRY GOULD SHARP,

STOCK AND SHARE BROKER,

21, THREADNEEDLE STREET, LONDON, E.C.

Bankers—London and County Bank, Lombard-street, London, E.C.

SAFE DIVIDEND INVESTMENTS IN STOCKS AND SHARES

PAYING 4 TO 7 AND 12 PER CENT. PER ANNUM ON OUTLAY.

SHARP'S INVESTMENT CIRCULAR.

THE JULY EDITION (post free).

SHOULD BE CONSULTED BY INVESTORS AND SHAREHOLDERS IN

STOCKS AND SHARES OF EVERY MARKETABLE DESCRIPTION.

CHEAP SHARES—SPECIALLY ADVISED FOR A GREAT RISE.

HERODSFOOT SILVER LEAD MINE,

ST. KEYNE, LISKEARD, CORNWALL.

In 12,000 Shares, 16s. paid. Price, Nominally, 2s. 6d. per Share.

A MAP OF THE MINE FORWARDED (post free), SHOWING WORKING.

A most important feature is the driving of the 117 fathom level, south part of set, where there is every prospect of opening up a good Mine independent of present workings and the north ground.

The present company has been working about three years. The mine was in a bad state, but all things have been put into working order (such work takes time), and about

£14,300 WORTH OF LEAD ORE HAS BEEN SOLD SINCE 1879.

They have a rich silver-lead lode in the 215 fathom level, for 40 fms. in length and 10 fms. in depth (between the 205 and 215 levels), and the shaft is sinking to the 225 fathom level to get under the same rich lode.

BUILDINGS AND MACHINERY, ENGINES, &c., COST £15,000.

They have a very large extent of ore ground unworked in the north part of the Mine for some 250 fms. in length, and 65 fms. in depth.

PRESENT SALES, 90 TONS EVERY TWO MONTHS.

Herodsfoot has been one of the richest and best dividend-paying Mines in Cornwall for silver-lead ore; it is still very productive, as sales of ore prove.

£80,000 WAS PAID IN DIVIDENDS ON AN OUTLAY OF £8700.

IN FORMER WORKING, AND SHARES ROSE TO £52 EACH.

It is now in full working; shares can be obtained for a few shillings each, and may rise 1000 to 3000 per cent. In fact, at present price no one can go wrong in buying.

TO INTENDING BUYERS OF CHEAP SHARES.

There is not a single Mine in the United Kingdom better worth investing in than Herodsfoot, taking into consideration the "very low price" of shares.

NOTE.—In February, 1879, pig-lead was £19 10s. per ton, it is now £14 10s. per ton (a fall of £5 per ton in 2½ years). A rise of £3 to £5 per ton is likely to take place before long, and with increased sales of ore dividends will be resumed. Under any circumstances shares are worth picking up at 2s. 6d. as a speculation.

NOTE.—The fact of the Mine being now rich in "SOUTH PART," 215 fathoms deep, it is considered certain that the "NORTH PART" will prove as rich below the 127 fms. level to the 215 level, which would give 65 fathoms of ore ground in depth, and 250 fathoms in length.

CHEAP SHARES—SAFE TO BUY—WILL RESUME DIVIDENDS IN 1883.

WHEAL JANE (TIN) MINE,

KEA, CORNWALL.

In 12,288 Shares. £1 16s. 2d. paid. Price 15s. to 17s. 6d. per Share.

A MAP OF THE MINE FORWARDED (Post Free) SHOWING WORKING.

NOTE.—Compared with all the tin mines in Cornwall, Wheal Jane shares are the cheapest and best to buy; they are now intrinsically worth £2 per share. The mine is now paying current costs.

12,288 SHARES at 15s. each IS ONLY £2216 FOR THE WHOLE MINE.

They have "six" engines upon this mine—which is most efficiently equipped with machinery for laying open the ore ground in the various levels, &c.

BUILDINGS, MACHINERY, ENGINES, &c., COST £20,000.

£16,896 HAS BEEN PAID IN DIVIDENDS FROM WHEAL JANE MINE.

TIN SOLD FOR FOUR MONTHS ENDING 1881 REALISED £2811.

TIN SOLD FOR FOUR MONTHS ENDING APRIL, 1882, REALISED £3084.

TIN SOLD IN JUNE REALISED £1292. Another 13 tons for sale.

EXTRACTS FROM SPECIAL REPORTS ON WHEAL JANE MINE.

CAMBORNE, 12th September, 1881.

Returns will increase to 15 tons, and gradually increase as the Mine is opened up. On the whole the Mine holds out good promise, * * * will soon be again brought into a profitable state.

Signed, T. HODGE, Manager of Wheal Grenville Mine.

WHEAL JANE MINE, 3rd October, 1881.

On looking on the different points throughout, the quantity of tinstone will considerably increase, which will materially add to your return of tin, and at nodistant date the Mine will again resume her former position as a dividend mine.

Signed, W. C. TREVENA, Manager Wheal Bassett Mine.

WHEAL JANE MINE, 15th December, 1881.

Wheal Jane will shortly be in a profitable position, and the Mine may therefore be considered a safe and valuable property.

Signed, JOSEPH PRISK, Manager of Phoenix United Mines.

WHEAL JANE MINE, 9th May, 1882.

The Belt Copper Mines (Limited).

Registered under the Companies Acts, 1862 to 1880.

CAPITAL £250,000, DIVIDED INTO 50,000 SHARES OF £5 EACH.

Of which 16,000 are to be allotted to the vendors, credited as fully paid up, and the balance 34,000 shares, are now offered for public subscription, payable as follows:—5s. per share on application, £2 5s. on allotment, and the balance in such calls as the directors may think fit, but no further call to be payable sooner than two months after date of allotment.

DIRECTORS.

The Right Hon. The EARL OF DENBIGH, 2, Cromwell Houses, S.W.
S. COXON, Esq., M.Inst.C.E., 23, Great George Street, Westminster, S.W.
K. H. JAMES, Esq. (Messrs. James and Shakespeare), 10, Austin Friars, E.C.
ARTHUR GEORGE KENDALL, Esq. (Messrs. H. Kendall and Sons), 12, Great Winchester Street, E.C.
MALCOLM LOW, Esq., J.P., 22, Roland Gardens, S.W.
JOHN SANDEMAN, Esq. (Messrs. Geo. G. Sandeman, Sons, and Co.), 20, St. Swithin's Lane, E.C.
E. WOLSELEY, Esq., 151, Cromwell Road, S.W.

With power to add to their number.

LOCAL DIRECTOR.

(In compliance with the Law of the State of Michigan)

ALFRED MEADS, Esq., Ontonagon, U.S.

BANKERS—Messrs. MARTIN & CO., Lombard Street, E.C.

BROKERS—Messrs. LAURENCE, SONS, & GARDNER, 3, Copthall Court, E.C.

SOLICITORS—Messrs. FRANCIS & JOHNSON, 22, Austin Friars, E.C.

SECRETARY—JULIAN SANDEMAN, Esq.

TEMPORARY OFFICES—62, PALACE CHAMBERS, WESTMINSTER, W.

One of the vendors will join the board after allotment of shares.

On the recommendation of the Royal School of Mines, Messrs. Bainbridge, Seymour, and Rathbone, mining engineers, were appointed to inspect and report on the Belt Copper Mines, and one of the directors, Mr. Coxon, M. Inst. C.E., was deputed to accompany Mr. Rathbone and personally inspect the property.

This company has been formed for the purpose of acquiring valuable native copper properties and mines known as the Penn, Bohemian, and Great Western, situated in Ontonagon county, State of Michigan, Lake Superior, consisting (as stated in the reports) of 3272 acres freehold land, which are sold as unencumbered by debt or royalty of any kind. The property covers an extent of over four miles on the great Lake Superior Copper Belt, which already furnishes about one quarter of the copper produce of the world, and on which is situated the Calumet and Hecla Mine, which according to the reports pays its shareholders annually over £400,000 sterling. Some of the important mines on the same mineral range are the Quincy, the Atlantic, Oscola, Franklin, Phoenix, and the first, as appears from the manager's report, has paid in dividends nearly \$3,000,000, the last dividend being at the rate of 44 per cent. per annum.

The Lake Superior Copper is pronounced to be chemically pure for practical purposes, leaving no residuum when dissolved in pure nitric acid, giving no precipitate when the solution is heated with ammonia, containing no trace of arsenic or other metal. For conductivity wire and cartridge metal it is preferable to most, and thus it always commands a ready market.

The Belt Copper Mines consist of two distinct properties: 1. The Great Western and Bohemian. 2. The Penn.

No. 1. The Great Western and Bohemian. These mines, which are purchased as a going concern, having an area of 1832 acres and an extent of 1½ mile on the Great Copper Belt which carries the celebrated well-defined and continuous native copper veins, yielding on the output more than 2 per cent. of pure copper. Its village, called Bohemia, is one of importance, and it is anticipated will very shortly be in direct railway communication with Chicago.

The reports testify that extensive surface developments have been carried out, and the mines are opened by numerous shafts and levels, the extraction and treatment of the ore awaiting merely the erection of modern machinery and appliances.

Mr. Ralston in his report states:—

"That the mines proposed to be purchased are in the best situations on the mineral range, that when the necessary machinery and appliances for working are erected, nothing can prevent them from returning a much larger output than the Calumet and Hecla. The Belt has been proved to go down 2700 ft. in several mines, and improves in richness in depth. Several shafts to an average depth of over 200 ft. have been sunk near the base of the bluff, and connected with levels (from an inspection of which Mr. Ralston calculates) that there is a block of mineral of 4,000,000 tons in sight, but as shafts may be sunk at least 4000 ft. before the veins leave the property there will be many times the amount of mineral above-mentioned.

Fuel, timber, and water are abundant throughout the property, and its value for mining purposes is fully explained in the reports.

The want of railway communication and economical means of transport to and from the shipping ports on the Lake and lack of capital have hitherto impeded the full development of this property.

These difficulties the directors are advised will be removed:—

In the first place by direct railway communication, not only with both shores of the lake, but also with Chicago by the Marquette, Houghton and Ontonagon Railway (which is nearly completed), as shown on the map, and the works on the unfinished portion of that line are being actively pushed on, and

In the second place, by supplying sufficient capital to this company to obtain machinery of the latest construction for rock drilling, crushing and washing, and other labour-saving appliances of all kinds, the cost of production will be reduced to the lowest point of economical working.

The situation of the veins carrying the native copper should admit of their being worked for some years from adit levels, and it is intended to erect machinery adequate to the extraction and treatment of about 200,000 tons annually, which, including the cost of the construction and equipment of 1½ mile of railway to carry the ore to the stamp mills to be erected on the river, will involve an expenditure of about £40,000. These works can probably be erected and the railway completed by 1st November next.

The usual and necessary houses for the workmen have been erected, and labour is readily obtainable.

It is calculated by the vendors that the present development of the property, assisted by the above-named expenditure of £40,000, for

machinery, should enable the company to extract and treat

180,000 to 200,000 tons of ore per annum, say:

Air compressors and power drills	£8000
1½ miles railway	3900
Rolling stock	4000
Stamp mills	25,000

£40,000

To illustrate the actual expenses of mining and producing ingot copper in this district, the following figures are quoted from the annual reports of two neighbouring mines, viz., the Atlantic and the Quincy.

The Atlantic output is 169,000 tons (of 2000 lbs.) Mining, milling, smelting, and all expenses, \$407,933=£241, or £181,586=9s. 8½d. per ton.

The Quincy output is 126,000 tons (of 2000 lbs.) Mining, milling, smelting, and all expenses, \$505,344=£311, or £101,068=16s. per ton.

Owing to the completion of the railway connection to within 1½ mile of Property the company should work at even a cheaper rate than either of these mines, but assuming 16s. per ton for expenses the following would result from an output of only 100,000 tons (of 2000 lbs.) per annum. This with a product of 2 per cent. would give—

4,000,000 lbs. ingot copper at 18 cents per lb. \$720,000, or £144,000
Deduct cost of mining, milling, smelting,
administration, and all other expenses \$1,
or 16s. per ton of ore \$400,000, or £80,000

£64,000

Which results are far below what are anticipated by the estimates of the engineers.

No. 2. The Penn. This is reported to be an extensive and very important property, six miles from Bohemia, having an area of 1440 acres, and a great extent on the Mineral Belt—viz., 20 miles. The reports show that the celebrated veins are continuous and well defined, and Mr. White, manager of the Quincy Mines, states that, "The property is large, and has a length of nearly three miles of veins, and a vein which has developed larger bodies of mineral for a greater length than any other which has been developed in the Lake Superior section." Timber is very abundant both for fuel and for mining purposes; there is also a plentiful and constant supply of water. The property lies near enough to Bohemia to be worked under the same management.

The directors of the company have reason to believe that if it be considered advisable this portion of the properties might be sold at such a price as would reduce the present cost of the mines without interfering in any way with the results estimated above. If, on the other hand, the directors feel encouraged to do so, they can, at some future period, develop this portion, and thus place the Belt Copper Mines in a position of greater importance with regard to extent and working.

It is thus shown that the Belt Copper Mines possess two distinct properties, each of them taken individually being of great value.

No. 1. The Great Western and Bohemian should yield a net income of say £64,000.

No. 2. The Penn. can either be realised or can be developed as may hereafter seem desirable.

Prospectuses and reports on the properties comprising the Belt Copper mines can be had at the bankers, brokers, and the offices of the company.

The vendors sell as the absolute owners of the freehold to the company, and have fixed the price to be paid at £165,000, of which they agree to take at least £80,000 in shares credited as fully-paid up, and so much more in shares as will leave the company at least £75,000, working capital.

By the contract with the vendors it is provided that if shares in the company to the amount of £100,000 shall not be subscribed and be paid for in cash be responsible persons, the agreement with the vendors shall not be enforceable by them.

£100,000 of the capital has been guaranteed by a number of responsible persons (to whom a commission for so doing will be paid entirely by the vendors). Two of the directors are among the guarantors. The guarantors being numerous, a list of them with dates and names of parties may be seen at the offices of the company. Subscribers for shares will accept this as sufficient notice to comply with the statute on that behalf.

The contract for purchase, which is by deed, is dated 14th July, 1882, and is made between Francis Ellershausen, Esq., and A. B. Cunningham, Esq. (vendors), of the one part [who as vendors pay the preliminary and other expenses of the formation and incorporation of the company, and also all commissions, in connection with obtaining the capital, advertising, printing, or of any other description whatsoever, up to the time of allotment of shares, and in addition all expenses of conveyance of the property] and the Belt Copper Mines Company (Limited), of the other part.

The original reports and the contract for sale can be seen at the offices of the solicitors.

THE AURIFEROUS WEALTH OF NEW ZEALAND.

The recent successful crushings of the gold ores from the Kapanga Company's mines have satisfied capitalists that mining enterprise in New Zealand does not go unrewarded, for when a few hundred ton parcels yield at the rate of over 3 ozs. of gold to the ton of mineral, doubt is quickly and satisfactorily dissipated. It will have been already guessed that the Kapanga is only one of many equally valuable properties in New Zealand, and that many under local auspices have been more cheaply inaugurated, and are quite as economically managed. As an instance of this reference may be made to the Ross Gold Mining Company, which is strictly local in its organisation, the offices and management being at Hokitika, where also the solicitors and manager reside, whilst of the board of direction the Chairman—the Hon. James Bonar, M.L.C.—and four of his colleagues are Hokiticans, two others residing at Auckland, and one at Ross. The object of the enterprise being to earn and pay dividends rather than to deal in shares, the capital was fixed at 30,000£, in shares of 17. each, of which 20,300 were issued at par in New Zealand, and 9700 in London at 10s. per share premium. Up to the end of December, the date of the last accounts to hand, 4s. per share had been called, and the board has power to make calls at the rate of 6d. per share per month. At the first meeting of the company, held at Hokitika on Dec. 23, it was shown that after some unavoidable delay incident to obtaining the grant of their special claim and the right to pass through the freehold land lying in the course of the Drainage tail race, active operations were commenced early in March by the letting of contracts for the first 20 chains of the tail race (open cutting); since then the work, although from its character necessarily slow, has been steadily pushed forward, and it was believed that the completion of the whole would be effected by May 7 of present year. The cost of the tail race was below the estimates. The Totara and Jones's Creek Water Race Company's property had been purchased and taken over, and the result of 2½ months' operation in the hands of the Ross Gold Mining Company was a profit of 938£. It is explained that the supply of water up to the date of the meeting had been equal to the demand, but should the requirements of the workings in any way interfere with this they can by a very moderate outlay increase largely the carrying capacity of the race, and with their rights to 32 Government heads meet the requirements of consumers as well. Contracts had been entered into for the construction of the hydraulic pumping and winding gear required, which they expected to have delivered in April of the present year. In the meanwhile the sinking of the main shaft was to be proceeded with, and they confidently hoped that within a short time afterwards the ground would be opened out, and the real work of mining commenced.

There being abundant evidence that there is an intention to manage the enterprise economically and well, it is only necessary to see that the character of the district is such as to give promise of success. Now, the Ross Flat, situated about 20 miles south of Hokitika, and parallel with the sea about a mile inland, is a level piece of country between the New Zealand Alps and the sea; it has been formed by the breaking down of the western slopes of those ranges, and is composed of successive beds of gravel and clay intersected by layers of auriferous deposits. The property consists of 100 acres of the flat, including the site of the town of Ross, the freehold of certain surface areas, and some valuable water races and water rights. The lease is direct from the Crown, and the property is bounded on the south by Donnelly's Creek, and on the east by Jones's Creek, both, especially the latter, being highly auriferous. Mining land upon the gold fields is usually held in small areas under miner's rights, but only on condition of constant occupation and work, and it is exceedingly rare to find a lease given by the Crown for so large an area in so important a locality as that held by the company. The lease comprises, amongst others, the original claims known as the Cassius, Morning Star, and Excelsior. It was in working the bed of Jones's Creek that the gold was first traced into the flat, and as soon as it became known that this large flat was payable, a rush set in, and the whole of the ground that could be worked by manual labour or by the aid of horse power was marked off in ordinary mining claims. Every one of the claims that were taken up and could be worked proved payable, and it very soon became known that the gold was not confined to one stratum, but that there was one layer below another with only a few feet between them. The depth of wash dirt on each of these bottoms averaged about 5 ft. in thickness, although in some claims there were from 6 to 8 ft. of auriferous soil. As each of the claims was opened out it was found that the further they went along the flat seaward the deeper the ground became, and the water increased in proportion until it became too heavy to bale with horse power, but the gold continued to run very regularly. Several gold mining leases were now applied for, and although there was great opposition on the part of the ordinary claimholders who take up mining land under ordinary miners' rights, it was easily proved that the ground could not be worked by the ordinary method, and they were, therefore, granted in claims of small area.

It appears that registered mining companies first made their appearance at Ross in 1866, and that for a time all went on prosperously. In some of the claims the third, fourth, fifth, and sixth bottoms were reached, and the gold seemed to flow in, and fully realise the anticipations that were formed respecting it, but amidst this prosperity the Drainage Board omitted to levy rates sufficient to carry out the arrangements with the drainage company, and consequently the company became unable to meet their engagements. They had spent the whole of their capital, and had borrowed a considerable sum to enable them to complete the drainage in a satisfactory manner, and when this money became due they could get nothing beyond their mere working expenses from the Drainage Board to meet it, and during the last 12 months of their existence they became so hampered that on many occasions they were unable to procure firewood to keep the engine going at sufficient speed to keep down the water. Those claims that were working in the deepest ground were the sufferers, consequently the Morning Star Company's claim was flooded to such an extent that they were unable to continue their workings in some instances for weeks. The drainage company's plant was consequently sold to enable them to meet their engagements, and was purchased by Mr. Michael Cassius on behalf of himself and the Morning Star Company. From Sept. 1, 1871, until the stoppage of the drainage engine in August, 1872, the Cassius, Morning Star, and Excelsior claims yielded 11,543 ozs. 9 dwts. 21 grs., worth 44,923£. 9s., being at the rate of nearly 366½ ozs. per week.

After a certain time had elapsed without anyone being at work, the Government declared the mining leases cancelled, and the flat was neglected until the beginning of 1880. About this date a company of capitalists recognising their opportunity secured by purchase the principal water races leading to the flat, furnishing a supply of water equal to 300-horse power, and having allayed local jealousies by inviting the co-operation of the miners, made application to the Government and obtained a lease of about 100 acres, already referred to. They then formed themselves into a Joint-stock Company, with a nominal capital of 30,000£, in 17. shares, which were disposed of, as already explained. The scheme decided upon by the directors was to sink a shaft for drainage purposes and for the development of the auriferous ground to any required depth; to cut a tail race from the shaft towards the sea at a depth of 75 ft. under the surface of the ground at the proposed shaft to carry off the water and the tailings from the workings; to substitute water for steam power; and to wash the gravel by hydraulic. The results so far have been satisfactory, and with regard to the future prospects of the company the workings already referred to have been of an imperfect character, and the bed rock or true bottom, where it is usual to find the heavier deposits of gold, has not yet been reached in the deep ground, and it is not known how many auriferous layers of earth yet remain to be penetrated between the last explorations and the bed rock. In the shallow ground at the higher portion of the flat, where the bed rock descends into the soil, rich pockets of gold have been discovered in the crevices of the rock, and it is reasonable to expect that further deposits of a similar nature and in increased quantities will be found on the true bottom being reached in the deep workings. These workings have been confined hitherto within an area of seven acres, and have proved that gold is dispersed in large quantities through that area, and it now remains to be demonstrated that the gold-bearing strata are not merely local to the seven acres which have been partially explored.

and unreliable to undertake a difficult and complicated calculation. This fact has been fully recognised by Mr. Francis Smith, whose compact little volume—2½ in. by 2 in.—has just been issued by Messrs. Crosby Lockwood and Co., of Stationers' Hall Court. Mr. Smith has carefully selected and arranged all the references likely to be required by mechanics, engineers, architects, builders, or surveyors, and in such a manner that everything is perfectly clear and can be instantly turned to; although in a book but ½ in. thick the learning of many voluminous books is condensed. In the revision for the Press the author has had the advantage of Mr. D. K. Clark's assistance, so that full reliance may be placed upon the tables for accuracy. Practical men will not fail to appreciate such a collection, so that Mr. Smith may certainly anticipate an extensive sale.

LEAD PRODUCTION IN GERMANY

	1881—tons.	1880—tons.
Mechernich Mining Co.....	22,409	20,275
Rhenish Nassau Mining Co.....	7,200	8,611
Stolberg Mining Co.....	13,996	13,975
Commerner Mining Co.....	2,362	2,120
A. Poensgen and Sons	3,189	2,900
Rothenbach Smelting Works	55	57
Giesche's Erben	5,489	5,258
Harz Prussian Government Mines	9,852	10,159
Tarnowitz	8,450	7,436
Freiberg Saxon " "	4,494	6,107
Remy Hoffmann.....	5,772	6,395
Goldschmidt	2,721	2,069
	85,989	85,362

WATSON BROTHERS' MINING CIRCULAR.
WATSON BROTHERS,
MINEOWNERS, STOCK AND SHARE DEALERS &c
1, ST MICHAEL'S ALLEY CORNHILL LONDON

NEWFOUNDLAND'S FIRST RAILWAY.—On June 29 the first passenger train left St. John's, the capital of Newfoundland, for Topsail, 20 miles distant, the first section of the line being now completed. The Newfoundland Railway was projected in the spring of last year, when the offer of an American syndicate for its construction was accepted in preference to that of a Canadian syndicate, but we believe the chief engineer, Mr. Holland, is an Englishman. The first proposal was to make 350 miles of line from St. John's to Notre Dame Bay, and 100 miles more to St. George's Bay if required, on the Colonial Government promising a subsidy of 63,000*l.* currency per annum for the first 300 miles for 35 years, and making the syndicate a liberal grant of land along the line. These terms were, however, ultimately considerably reduced, and those finally agreed upon were a subsidy of 150,000 per annum, equal to about 45,000*l.* currency or 36,000*l.* sterling, and a total grant of two millions of acres of land. The rail-

FLAMELESS COMBUSTION.—Certainly the most striking feature at the *soirée* of the Society of Chemical Industry at the Owens College, Manchester, was the experiments of Mr. Thos. Fletcher, of Warrington, showing the practicability of flameless combustion. It will be recollected that Mr. Jacob Reese—the inventor of the Reese fusing disc—stated his belief that if it were possible to produce combustion without flame the temperatures and duties obtained from any fuel would be much increased, and Mr. Fletcher has demonstrated the accuracy of this view. Taking a ball of iron wire about 3 lbs. in weight, Mr. Fletcher placed it on a slab of fire-clay, and directing a blowpipe flame on it for a few seconds he suddenly blew the flame out. The temperature increased so rapidly that in a few seconds the wrought-iron fused and ran into drops, and this temperature was steadily maintained. The room was darkened, but the closest examination did not show a trace of flame, although that the gas was burning was proved by repeatedly relighting and extinguishing it. The same experiment was repeated in another form by directing

TABLES AND MEMORANDA FOR MECHANICS.—The great, if not the sole, utility of tables, memoranda, and calculated results is for reference when from the hurry of practical work it is inconvenient

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The Mining Market: Prices of Metals, Ores, &c.

METAL MARKET—LONDON, JULY 21, 1882.

IRON.	£ s. d.	£ s. d.	TIN.	£ s. d.	£ s. d.
Pig, G.M., f.o.b., Clyde...	2 12 0	—	English, ingot, f.o.b., 108...	0 0-109 0 0	—
Scotch, all No. 1...	2 12 9-2 13 0	—	" bars...	0 0-110 0 0	—
Bars, Welsh, f.o.b., Wales...	5 10 0-5 12 6	—	" refined...	0 0-111 0 0	—
" In London...	6 2 6-6 5 0	—	Australian...	0 0-105 5 0	—
" Stafford...	7 2 6-7 5 0	—	Banco...	nom.	—
" In Tyne or Tees...	6 2 6-6 5 0	—	Straits...	0 0-105 5 0	—
Swedish, London...	10 0 0	—	COPPER.		
Rails, Welsh, at works...	5 10 0-5 12 6	—	Tough cake and ingot...	70 0 0	—
Sheets, Staff., in London...	8 0 0	—	Best selected...	72 0 0	—
Plates, ship, in London...	9 0 0	—	Sheets and sheathing...	78 0 0-79 0 0	—
Hoops, Staff., in London...	7 5 0-7 10 0	—	Flat Bottoms...	81 0 0-82 0 0	—
Nail rods, Staff., in Lon...	6 15 0	—	Wallaroo...	72 0 0	—
STEEL.			Burra, or P.O.O...	71 0 0	—
English, spring...	12 0 0-18 0 0	—	Other brands...	66 0 0-68 0 0	—
" cast...	10 0 0-15 0 0	—	Chili bars, g.o.b...	68 2 6	—
Swedish, keg...	15 0 0	—	QUICKSILVER.		
" fag. ham...	15 10 0	—	Flasks, 75 lbs. war...	5 17 6	—
Rails, at works...	5 12 6-5 15 0	—	Phosphor bronze...		
" Light, at works...	6 12 6-7 2 6	—	Alloys I., II., III., and IV...	£125 0 0	—
LEAD.			" VI. and VII...	140 0 0	—
English, pig, common...	14 7 6	—	" XI., Spl. bearing metal...	117 0 0	—
" L.B....	14 12 6-14 17 6	—	BRASS.		
" W.B....	15 0 0-15 2 6	—	Wire...	7 1/4	—
" sheet and bar...	15 2 6	—	Tubes...	9	—
" pipe...	15 12 6	—	Sheets...	7 1/2	—
" red...	16 10 0	—	Yel. met. sheath. & sheets...	6 1/4-6 1/2	—
" white...	19 10 0-21 10 0	—	Charcoal, 1st quality...	1 10-1 20	—
" patent shot...	17 5 0	—	" 2nd quality...	0 19 0-1 0 0	—
Spanish...	13 17 6-14 0 0	—	Coke, 1st quality...	0 17 0-0 18 0	—
NICKEL.			" 2nd quality...	0 16 0-0 17 0	—
Metal, per cwt...	15 0 0-16 0 0	—	Black...	15 10 0	—
Cr. 10 per cent. per ton...	0 0-25 0 0	—	Canada, Staff., or Gla...	12 0 0	—
SPELTHER.			at Liverpool...	13 0 0	—
Silesian...	16 12 6-16 17 6	—	Black Taggers, 450 of...	30 0 0	—
English Swansea...	17 10 0	—	14 x 10...	30 0 0	—
Sheet zinc...	20 15 0	—			

At the works, 1s. to 1s. 6d. per box less for ordinary; 10s. per ton less for Canada, 1X 6s. per box more for 1X quoted above, and add 6s. for each X. Terne-plates 2s. per box below tin-plates of similar brands.

REMARKS.—During the past week the Metal Market has remained extremely steady, the tone for the most part being good. There is a fair amount of legitimate business doing at the present time, and this tends to give support to prices, and also to encourage speculative buying, but at the same time what speculation is now going on does not appear to be so much in anticipation of large returns and profits being made during the immediate future, but rather the disposition is to look far ahead, when some of the present difficulties which surround our markets may be overcome; and when the summer months have passed, and the autumnal trade begins, there are dealer rates confidently looked forward to, caused from the transacting of a good bona fide trade, and now while such sanguine views are entertained prices display a hardening tendency, and an absence of sharp fluctuations has characterized our markets almost all round. Our markets have recovered from their previous languid condition, while a steady improvement may now be looked for, and which may lead to a thorough restoration of confidence and the re-establishment of a healthy feeling throughout the whole trade. Of course, there are still some few adverse influences at work to check trade, and some features which bear a local detrimental effect upon the separate metals, but here we have more particularly to take circumstances collectively, and in looking at them in this way it does seem as though the favourable events considerably outweigh those which may tend to retard business. The present difficulties attending political affairs and the uncertainty of the home harvests may depress the markets, but then against these adverse influences we have to remember that consumers and shippers are reported for a long time past to have been buying in somewhat sparing quantities, while here it may be well to state that the little extra enquiry which now appears to be springing up is taken as a probability that consumers' private stocks are being worked off, and it is thought that the time in consequence cannot be far distant when renewed activity will mark the legitimate demand.

There is a very firm and satisfactory feeling prevailing, and this must tend in a great degree to expedite a thorough restoration in the trade. It helps to give a fresh vigour to buying, and to some extent tends to place adverse features in the background, and further, it brings prominently to the front all those events which in any way tend to induce buying or push up prices. A cheerful feeling forms a great impetus to the trade, and at a time like the present the gradual rise in prices will most likely be the means of still further strengthening the tone, and implant and diffuse greater confidence in those circles where up to the present they have been slow to realize or believe in any permanent improvement in the trade. It is, too, a satisfactory sign that the iron market should be showing symptoms of recovery, for this being the leading market, others invariably followed in the same course, and are influenced in no small extent by the changes which take place in that market. We reserve our account of the actual state of that trade for our remarks under its own particular heading; but here it may be well to state that prices for iron are low, that stocks are decreasing, and that the demand is on the increase, and with these facts before us, and with the knowledge of the great influence which iron generally has upon other metals, it is not difficult to gather some cause to which the better feeling may be attributed, and more especially in those metals in which the position of the individual market has improved, either perhaps from an extra demand or reduced supplies.

COPPER.—On Monday morning last the Chili charters were announced for the first half of the present month as only 1400 tons, which greatly tended to strengthen the market, for there were many operators who had built their hopes upon light charters, and a limited quantity only being advised, a good tone was naturally given to the market. Buyers to some limited extent became more eager to effect purchases, but the great support which seems to be given to the market at the present time does not appear to be altogether the result of large purchases, but rather a combined reluctance on the part of holders to make sales, so that during the past week, when purchases have had to be made, buyers have had to pay rather stiffer rates. The rise which has been effected is chiefly visible in Chili bars, other descriptions, although firm, not having undergone any alteration, while the advance in Chili bars has been steady, stiffening to

the extent of about 2s. 6d. per ton per day. A gradual rise such as this can hardly fail to improve the tone, and implant a more cheerful and confident feeling, and more particularly so just now, when manufacturers report holding a very fair number of orders, sufficient, in many instances, to give regular employment to their mills for some weeks hence. Taken on the whole, the market is apparently in a sound and satisfactory condition, and with the extra business that is doing, it remains to be seen whether deliveries have exceeded supplies, which cannot be ascertained until the end of the month, when the statistics are made up; but unless the deliveries are exceedingly good, it is a little questionable whether stocks will be reduced, because the Chili charters for the latter part of June were very heavy, and they will have to be taken into account when the next statistics are compiled. The bi-monthly returns of Chili produce show the imports for the first fortnight of the present month to have been 2235 tons, and the deliveries 1336 tons, while the imports of other kinds of copper for the same time have been 1472 tons, and the deliveries 755 tons. These returns are not altogether satisfactory, for they show the imports to have been in excess of those for the same time last year, and the deliveries less. The stock of Chili and Bolivian produce in first and second hands in Liverpool and Swansea on the 14th inst. was 24,498 tons, against 23,593 tons on the 30th ult.

IRON.—The demand for manufactured iron remains fair; and, although there are not a very large number of orders being placed, yet prices are rather dearer, sellers all round being reluctant to make concessions; in fact, manufacturers generally report that they have no difficulty in obtaining their quotations, and, therefore, there is no necessity to endeavour to stimulate the demand by accepting reduced rates. The tone of the whole trade, however, is much improved by the favourable advices which come from Glasgow of the state of the market there, prices being reported strong, with an active business doing. The statistical position of the market has not undergone much change, the unreported returns only showing a slight reduction in the stock, but at the same time shipments are maintained upon a somewhat large scale, while the demand also for makers' iron is said to be exceedingly good; and, although prices are rather irregular, yet a decided advance has been made, and the market receives considerable support from legitimate causes. With such advices as these before the trade it is not surprising the market should be characterized by considerable firmness, and that there also should be a great desire evinced to make purchases. Prices are still very moderate, notwithstanding the advance which has been made during the past few weeks; and, although they are higher than those ruling at the corresponding time for the last few previous years, yet they are extremely moderate rather than stimulate than to check trade, and are low when taken in comparison with times when a fairly good legitimate trade has been doing.

Much life is also given to the market, for in addition to that doing to meet the regular requirements of the trade, there are also many transactions being carried through for speculative account, and which has also at times imparted strength to prices. Owing to the Glasgow fairs there was no warrant market, held last Monday, but on Tuesday buying was spirited, and after some few parcels had been sold at 50s. 4d. to 50s. 7 1/2d., the price further advanced to 50s. 11d., closing for the day with buyers at 50s. 9d., while on Wednesday the market remained firm with transactions being done at 50s. 10 1/2d., strengthening still further at the close to 50s. 11d., buyers, and 51s. sellers, and remained steady theretofore yesterday morning, but further advanced in the afternoon to 51s. 6d., while this morning 52s. was touched, and the market closes for the week at this figure. The shipments last week were good, being 13,136 tons, against 11,118 tons for the same week of last year, or an increase of 2018 tons, and which makes the total shipments for the whole of this year 339,536 tons, against 301,227 tons for the same time of last year, and 404,914 tons for the period of 1880. The number of imports in this year remain at 103, and the stock has again been slightly reduced, amounting to 635,285 tons, against 635,487 tons last week. The imports of Middleborough pig iron into Grangemouth last week were 5605 tons, against 3575 tons for the same week of last year, or an increase of 2030 tons, and which leaves a total decrease for the whole of this year, compared with last, of 43,132 tons.

The Cleveland market has been very firm, and partly from a good demand and partly in sympathy with the rise in Scotch pigs, prices have advanced to 44s. for No. 3. Second-hand lots are also dearer, and are offering from 43s. 8d. to 44s., while warrants are held from 41s. to 41s. 6d. Makers are said to have sold large quantities of iron of late, while the public stock again shows a slight decrease of 436 tons. Shipments have continued to be fairly well sustained, those last week being nearly 17,000 tons. The manufactured trade remains firm, but without alteration in prices, common bars and angles ruling at 61s. 5s., and ship plates at 61s. 15s., while puddled bars are offering at 60s. per ton. The Wolverhampton market is said to be quiet, but prices are firm, and in some instances they are quoted slightly higher, several of the sheet makers asking an advance of 5s., while galvanised sheets are quoted at 10s. advance. There is a fair demand for hoops, which are held from 47s. 10s. to 47s. 15s. Pigs are said to have sold here in not much business doing, Tredegar hematites being quoted at 67s. 6d., or an advance of 2s. 6d. per ton.

The Birmingham market does not show very much variation; a moderate business is being transacted, and prices all round remain firm, while in a few cases slightly dearer rates are being quoted. There is, however, no general rise, and manufacturers, for the most part, would doubtless accept orders at previous rates, although it does not seem likely that they would make any concessions. Upon the Sheffield market a moderate business is being reported, and some of the works are fairly well employed, while prices keep steady. There is also a very fair amount of business doing in Wales, the quantity being turned out being fairly large. According to advices received from New York of the 14th inst., there is rather more enquiry for pigs, and prices for some brands of Scotch pigs show a slight advance. No. 1 Garthsherie rules at 28s. 6d., Glasgow at 28s. 6d., Coltness at 28s. 5d., and Elgin at 28s. 3d. The quotation for prompt shipment of hematites is 23s. and for Cleveland pigs 21s. 5d. Scrap iron and old rails are offering at 25s. and 27s. 5d. respectively.

TIN.—We have again to report a good market for this metal, with a large business being transacted from day to day. As prices advance, instead of there being any check to the demand, there seems even more disposition to make purchases, and no one will attempt to predict how high this metal is likely to rise. Some few pounds per ton above present figures are generally expected to be realised in a very short space of time, which opinion is based upon the present actual state of the market, entirely irrespective of what may occur from speculative purchases. There is a growing consumption, so that deliveries may well be expected to be maintained, while those for the first half of the month are reported as fully up to the average, and with regard to supplies they are invariably limited at this time of the year, and the dealer prices ruling both at Straits and Australia compared with those here are proofs that supplies are likely to continue particularly limited. From a statistical point of view, therefore, there is every reason to look for better prices, while the advices from America this week are again favourable, showing that still further enhanced rates are ruling in that country.

QUICKSILVER was very steady when the importers, probably to generate a still better demand, put the price back to 51s. 17s. 6d., at which firmness prevails at the close.

STEEL.—A fair business continues to be transacted, and some of the works report being very busy. Prices remain steady, and without quotable change.

TIN-PLATES.—There is no material change in the state of this market, prices being strong, doubtless due to the higher value of tin, and also to the existence of a fair demand.

SPELTHER.—The market is quiet, and without any alteration in prices.

LEAD is dull at about previous rates.

The MINING SHARE MARKET has been rather more active this week, but without much variation in prices, which for the most part continue low, and in many cases merely nominal.

The mines dealt in have included East Caradon, East Blue Hills, West Kitty, Wheal Agar, Wheal Pevor, Dolcoath, Roman Gravel, West Crebor, Wheal Crebor, Bedford United, and a few others.

TIN has been very firm, and advancing all the week, but no change had taken place in the standards for ore until Friday, when it advanced 2s. Shares have been rather more dealt in, and some have advanced. Blue Hills, 1 to 1 1/2; Carn Brea, 1 1/2 to 1 3/4; Dolcoath, 72 to 74; Drakewalls, 1/2 to 3/4; East Lovell, 1/2 to 3/4; Killfret, 53 to 54; South Condor, 8 to 8 1/2; South Frances, 1 1/2 to 1 3/4; West Bassett, 10 to 11; Kit Hill, 1/2 to 3/4; West Frances, 9 to 10.

East Blue Hills have advanced to 10s. 6d., 12s. 6d.; at the meeting, full particulars of which will be found in another column, the accounts show a cash balance in hand of 1809l. 6s. 8d., and no liability whatever. During the exploratory work and erection of wheels and stamps, the former having resulted in the laying open of tin ground estimated at 6000l., tin has been sold from six heads of stamps for 71s. 10s. 3d. In a few months 20 heads will be at work, and the returns increased, it is estimated to 8 tons, which at 60l. per ton would yield 200l. to 250l. per month profit. The agents conclude their report by saying—"We consider you have in this mine a most promising and valuable property, and one which will ultimately well repay you for all your outlay." Polrose, 1/2 to 1 1/2; this mine is looking better in the shaft. Wheal Agar, 1 1/2 to 1 3/4; Wheal Bassett, 9 1/2 to 9 3/4; Wheal Grenville, 10 1/2 to 11.

Wheal Pevor has declined to 7 1/2 to 8 1/2; Wheal Uny, 3 1/2 to 3 3/4; West Pevor, 1 1/2 to 1 3/4; at the meeting the account showed a balance against the mine of 983l.; the tin sold realised 207l., cost 3065l. The agents hope to return 18 tons of tin per month. Cook's Kitchen, 38 to 40; at the meeting there a loss was shown on four months' working of 17l., and a balance against the adventurers of 1649l. The tin sold, 81 tons, realised 5066l. East Pool, 55 to 57, ex div.; at the meeting a dividend of 1l. 15s. per share was declared. The accounts showed the sales 20,663l.; copper, 705l.; arsenic, 500l.; wolfram, 100l. This profit at the quarter was 11,948l., and after payment of dividend at 35s. per share (11,200l.) a balance was carried forward to the reserve fund of 748l. West Kittys have advanced to 1 1/2 to 1 3/4; the 80 east is worth 25l. per fathom; 72, 9d.; slopes in back, 40l.; and it is said that a good profit will be shown at the meeting on the 26th, which is to be held on the mine. Trevarnace, 2 1/2 to 2 3/4; the meeting here will also be held on the mine on the

26th. Tregembo, 3 1/2 to 4; South Crofty, 10 1/2 to 11; Goodevere, 1 1/2 to 1 3/4; New Trumpet, 1 to 1 1/2; Tincroft, 12 to 13; West Poldice, 1 1/2 to 2; Wheal Kitty (St. Agnes), 1 to 1 1/2; West Godolphin, 1 1/2 to 2.

COPPER has been firm, and one or two mines have been in favour, but there is little change in prices. The standard for ore advanced 1l. at the Ticketing on Thursday, produce 5 1/2, standard 111l. 2s. Bedford United have been more in request, and advanced to 1 1/2 to 2; Carnarvon, 1/2 to 3/4; Devon Great Consols, 5 to 6; the ore, 925 tons, realised 1898l. 1s. 6d. Devon Great United, 1/2 to 3/4. East Caradon have advanced from 1s. 6d. to 1s. 8d.; at the meeting a call of 2s. 6d. per share was made. Mellanear, 1/2 to 5 x. d. announced last week; Devon Friendship, 5s. 6d. to 6s. 6d.; the mine continues to look well, and the agents will give a full report next week. West Crebor, 12s. to 14s.; the lode in the shaft is 5 ft. wide, with lumps of mundic in it which is considered a good sign. Wheal Crebor, 2 1/2 to 2 3/4; the agents now report that since the meeting last week the No. 1 winze, below the 120, is reduced to 2 ft. wide, with stones of ore, and No. 2 affected by a flaw of spar, and reduced in value to 40l. per fathom. Gunnislake (Clitters), 2 1/2 to 2 3/4; the ore, 441 tons, sold for 2457l. 17s. 6d. Marke Valley, 5s. to 10s.; at the meeting a call of 4s. per share was made. The ore, on Thursday, 160 tons, made 529l. 3s. Mona, 1 1/2 to 5; Mona Consols, 1 to 1 1/2.

South Devon United, 17s. 6d. to 22s. 6d. South Penstruthal, 1/2 to 3/4; at the meeting the accounts showed liabilities over assets of 966l. 19s. 1d., and a call of 5s. per share was made. The arrears on shares (501l. 15s.) and forfeited shares being credited (537l. 15s.). The prospects are encouraging. North Penstruthal, 10s. to 15s.; the accounts here showed liabilities over assets 891l. 17s. 2d., and a call of 4s. per share was made. The prospects here are very good. The accounts at Cathedral showed liabilities over assets 293l. 0s. 5d., and a call of 2s. 6d. per share was made. The prospects in the bottom of this mine are most encouraging, seeing that the shoot of ore discovered by the old workers in dipping east and already in the shaft, and in a few feet sinking the lode, the agents think, will be more productive. West Caradon, 1/2 to 3/4; Parys Copper, 8s. to 10s.; Prince of Wales, 9s. to 11s.; West Seton, 1 1/2 to 1 3/4. New Cook's Kitchen, 5 1/2 to 6 1/2; at the meeting the accounts showed a loss on four months of 369l., and a debit balance of 1263l.

LEAD shares are still quiet, and very little business doing. Lead and blende are both firmer. Vans are quoted 5 1/2 to 6; Great Laxey, 17 to 18; Roman Gravel have been dealt in at 8 1/2 to 9; Tankerville Great Consols, 4s. 6d. to 5s. 6d.; they have cut through the North lode 8 1/2 ft. wide in the 232, worth 1 1/2 ton per fathom. At Potter's pit No. 1 winze, below the 105, is worth 20 cwt., and No. 2 winze 30 cwt. per fathom. Bog improves; they have sampled 100 tons of lead ore from the three mines. East Roman Gravel, 15s. to 17s. 6d.; mine looking as usual. Gwernynydd, 1/2 to 1; D'Eresby Mountain, 1 to 1 1/2; the mine sold 20 tons of lead early in this month at a little over 9l. per ton, and sample 20 tons more on Saturday. The points in operation are worth 11 tons per fathom in the aggregate. Cood-y-Fedw, 1 to 1 1/2; Goddard's, 1 1/2 to 1 3/4; Great Holway, 5 to 5 1/2; Herodsfoot, 1s. to 2s.; Leadhills, 2 1/2 to 2 3/4; Penant, 4 1/2 to 5; Pen-yr-Osred, 10s. to 20s.; Sinclair, 1 to 1 1/2; South Darren, 12s. 6d. to 17s. 6d.; West Holway, 1 to 1 1/2; West Lisburne, 1/2 to 1 1/2.

FOREIGN MINES.—Akankoo, 1/2 to 3/4; Alamillos, 1 1/2 to 2; Almada and Tinto, 1/2 to 3/4; Anglo-African Diamond, 6 to 7; Broadway, 1 1/2 to 2 1/2; Canadian Copper and Sulphur, 1/2 to 1 1/2; Cape Copper, 5l. to 5 1/2; Chile Gold, 1/2 to 3/4; Copiapo, 3 to 3 1/2; Devala Moya, 1 to 1 1/2; Devala Central, 1/2 to 3/4; Eberhardt, 1/2 to 3/4; Fortuna, 3 1/2 to 4; Fronto and Bolivia, 2 1/2 to 2 3/4; Indian Consolidated, 1/2 to 3/4; Indian Gold, 1 1/2 to 1 3/4; Indian Phoenix, 1 1/2 to 1 3/4; Indian Trevelyan, 1/2 to 3/4; La Plata, 2 to 2 1/2, and in demand; the value of the fortnight's consignments to the smelters has been 17,066l. Linars, 4 to 4 1/2; Mason and Barry (to bearer), 16 1/2 to 17 1/2; Nouveau Monde, 1/2 to 3/4; Oregum, 1/2 to 3/4; Panulillo, 6 to 6 1/2; Pestarena, 1/2 to 3/4; Rhodes Reef, 3/4 to 1; Richmond, 7 1/2 to 8 1/2; Rio Tinto (registered bonds), 100 to 102; shares to bearer, 24 to 25; Ruby and Dunderberg, 1 1/2 to 2 1/2; South-East Wynaad, 3 to 3 1/2; St. John del Rey, 150 to 170; Tambracherry, 1/2 to 1 1/2; Tharsis, 41 to 42; Wentworth, 3 to 4; Wynaad Perseverance, 1 to 1 1/2.

Bratsberg, 1 1/2 to 1 3/4; Don Pedro, 6s. to 8s.; Tolima, 2 1/2 to 3 1/2; Colombian Gold, 1/2 to 3/4; Gold Hill, 1 to 1 1/2; Birdseye, 1 1/2 to 1 3/4; Kapanga, 11-16ths to 13-16ths; Michipicoten, 1/2 to 1; Placerville, 1 to 1 1/2; Yuba, par to 16ths. Organo, 2 1/2 to 2 3/4; these shares are again firmer, large transactions having taken place during the week. A report, dated July 8, from Mr. Gledhill, manager of the Frias Gold and Silver Mines of the Tolima Company (Limited) has been received, but was received too late for publication; it tends to confirm the reports of the manager as to the large and profitable returns.

The Market for Mine Shares on the Stock Exchange has been somewhat more active during the week, but the business has been chiefly confined to foreign, and especially to Indian, mine shares. Considering the excellent position of tin and copper, it is surprising that mines producing those metals are not more sought for. Perhaps the further rise of 2l. in the tin standards, noticed in the telegram below, may have the desired effect. At the close this evening there was much more disposition to buy.

Our usual telegram from Cornwall this evening says:—A further advance in the tin standards of 2l. per ton was made by the Cornish smelters to-day consequent upon the improved position of the tin market. During the week a firm tone has characterised the share market, but business has been rather restricted to the leading shares. At East Pool meeting a profit of nearly 12,000l. was reported, and 35s. per share dividend declared. At West Pevor a capital report was presented, the loss on the quarter being 1057l., but 1000l. had been spent in improvements. At Cook's Kitchen yesterday a loss of 17l. was reported, no call being made. Cathedral Consols has called up 2s. 6d., North Penstruthal 4s., and South Penstruthal 5s. per share. West Pevor has 137l. in hand. At Truro yesterday 1986 tons of copper ore realised 7466l., the standard advancing 1l. per ton. At New Cook's Kitchen meeting yesterday a loss on four months' working of 369l. was reported, leaving a balance of 1263l. against the mine.

In Electric Light Companies shares there has been a fair amount of business done, but prices continue to fall heavily, and although the market does not close at its worse, the quotations show a decline as compared with last week. Much injury has been done to electric companies generally by the abnormal condition of the Parent Brush's. It is now prominently announced that the Anglo-American Brush Electric Light Corporation announce a dividend at the rate of 200 per cent. per annum, but it is not stated that the profits have been chiefly derived from the sale of concessions, and that this is a merely transient source of profit, and is daily diminishing. This is pretty evident from the fact that the City (London) Commissioners of Sewers on Tuesday, after much discussion, adopted a report of a Committee deciding not to proceed farther at present with the electric lighting of the City, owing to the enormous cost of the electric light compared with the charge for gas. The fact is that the industrial application of electricity is yet in its infancy, and many of the best arrangements are only now coming forward. On Tuesday evening there was a demonstration of the Gumpel arc and Fitzgerald incandescent lamp by the Phoenix Company—both lamps are excellent, and are referred to in another column. Mr. Jablochhoff, the inventor of the "candle" bearing his name, and which is certainly the most simple known, has submitted to some scientific friends in London a new electric motor, which, while giving greater results than the motors at present known, has the merit of extreme simplicity. The cost of the new dynamo is trifling, and it is applicable to a variety of industrial purposes as well as lighting. The details respecting the machine will be published in next week's Mining Journal.

Souback and Catir Alan shares are reported to have been in demand, in consequence of the company having received their first parcel of rich ore, which is now in the hands of Mr. F. Claudet, the assayer, of Coleman-street. It consists of a sample of about 2 1/2 or 3 cwt., and appears to be a carefully dressed or picked sample of mixed lead and blende of not unusual appearance. It is, of course, impossible to state the value accurately by inspection, especially as the separation of those two metals is a costly and often difficult

process. It must be distinctly understood, however, that this sample has no connection with the specimens referred to in Claudet's assay note of July 5, as special enquiry was made on this point. The exact weight of the three samples—"Flat piece," "Thick piece," "Powder"—which gave results at the rate of from 8000 to 87000 per ton, cannot be ascertained but, until the contrary is officially stated, may be assumed to amount together to perhaps a small fraction of one ounce. It would be a protection to the public and would relieve assayers of the charge of connivance with those who send them samples if they in every case stated the weight of the samples received for assay.

The Sleepy Hollow Gold Mine, with a capital of 50,000, in shares of 10 each, has been formed to purchase for 25,000 (12,000 in cash and the rest in shares), and develop the well-known mine of the same name in Gilpin county, Colorado. The grant comprises 1400 ft. on the run of the lode by 150 ft. wide. The first 500 ft. are held by U.S. patent, and the remaining 810 ft. by recorded warranty deed, so that there is no probability of dispute with regard to title. The mine is situated between the towns of Central and Black Hawk—a district enjoying advantages greatly superior to those of any of the mining sections of the United States, besides being in the very midst of an exceptionally rich gold district. Mines in its immediate vicinity, with not any more ground or greater facilities in any way, are paying annual profits of from 15,000 to 20,000. The Fiske lode has yielded much value; some say \$50,000, and it is on this vein that the Sleepy Hollow property is situated. Mr. Ernest Le Nève Foster, M.E., whose name is a guarantee for reliability, and who has long been resident in the States, reports that the character of the lode in its general make-up is identical with that of the majority of the most productive mines of the district, and particularly with that of the Fiske. It is a regular and well defined fissure, 2 to 3½ ft. wide, in a gneiss formation, the almost horizontal benches of which it cuts with an angle deviating only a few degrees from the vertical. The pay-streak or ore leader of the lode is quartz, with iron pyrites impregnations containing gold and a subordinate quantity of silver. The lode, regular and more or less ore from the outcrop, first showed ore in paying quantity at 250 ft. from the surface, and the section and the record of the mine show that from that depth to the present bottom the proportion of good stopes ground has been large and increasing. The average grade of the ore is also very good; in fact, it is superior to that of most of the neighboring mines. In his opinion the company has a valuable piece of property, and one which, with the expenditure of a small working capital in judicious development and economical management, may hereafter be expected to make its mark in Gilpin county. Mr. Thomas J. Richman, of Central City, Gilpin county, Colorado, writes:—"It is located on what is known as Bobtail Hill, and is on the Fiske vein, and I consider it as one of the best mines in Gilpin county; I know this from the fact that, in running a Custom mill for several years I handled the ore from nearly all of the mines in this country, and none of them gave a better average of gold than the Sleepy Hollow." The freedom of the mine from water will allow of its being worked and developed both day and night. The prospectus will be found in another column.

The West African Gold Fields with a capital of 100,000, in shares of 20 each, formed to purchase for 55,800 (22,500 in cash, and the rest in shares) the lease of a gold property in the Axim district was referred to in the *Mining Journal* of July 8; the prospectus has now been issued, and will be found in another column. It appears that Mr. Fred. Claudet from a sample of 3 lbs. of Apatim clay obtained at the rate of 1 oz. 13 dwts. 12 grs. to the ton of 20 cwt., and Capt. Burton declares that he picked up the clay at random, and that the property contains millions of tons of it. The lease granted last year by Chief Kwabina Sensesse, of Apatim, embraces 144,000,000 square feet, or 3300 acres of land known as the Gold Mines of Boujah, and all mines, minerals, and substances upon and under the same, for a term of 99 years at a yearly rent of 12½ to be increased to 1200 from the commencement of the regular working of the mines, with the option of renewal for a further period of 99 years upon the same terms. The lease has been duly registered in the registry of the Supreme Court of the Gold Coast Protectorate. Although it is probable that Burton and Claudet's statements are greatly exaggerated, it must be acknowledged that if they have any reasonable foundation in fact large quantities of gold must exist. The prospectus truly states that the Gold Coast of Africa has been famous for centuries as a gold producing country. This gold has been hitherto obtained in the most elementary manner, the natives being in absolute ignorance of the commonest mechanical appliances for draining and working their shafts. As soon, therefore, as the mines are drained out, which constantly occurs, the natives sink another shaft; and so rich is the whole country that for centuries they have been satisfied with the foregoing methods, leaving the underlying wealth for the intelligence and enterprise of the present day. It is intended that this company shall organize, when practicable, other companies, amongst whom portions of the land shall be divided, each paying to this company such price in cash and shares as may be arranged between them and the committee. Thus the parent company, in addition to its own mining operations, will, as holders of stock in the various companies to be formed, be interested in the whole mining industry of the concession. Pending subdivision of the property, the washings alone will, in the opinion of the committee, enable them to pay handsome dividends on the capital of the company.

The Electrical Insulator Manufacturing Company, with a capital of 100,000, in shares of 10 each, has been formed to purchase for 25,000, a freehold of 47 acres at West Wellow, Wiltshire, and manufacture insulators, battery jars, porous cells, accumulators, and other non-conducting appliances which must be used in the construction of electric lighting, telephonic, telegraphic, and electric railway systems. The prospectus states that the extraordinary impetus given to the progress of electrical science, and its almost universal adaptation to meet public requirements for purposes of the greatest utility has created a growing demand for insulating materials of high resistance. The directors are informed that the few firms who make this class of goods their special business are so full of work that they cannot take orders for the future which will take some years to execute. The introduction of the electric light and telephone into private houses, which is considered to be but a question of time, will create such a demand for superior insulators that their manufacture must be upon a scale hitherto unparalleled. It appears that the difficulty most manufacturers have to contend with is the presence of a large percentage of iron in the various clays, which considerably depreciates the resisting power as an insulating medium, and, by reason of the process requisite to eliminate the iron, occasions a very considerable extra expense in the manufacture. Apart from the cost of the company's business, the clay being of the finest quality can be manufactured into artistic pottery, tiles, and almost every description of earthenware, thus adding materially to the profits of the undertaking. The directors base their estimate of profits principally upon the fact that 1 ton of clay will manufacture insulators to the value of 250, of which it is estimated the cost of labour, fuel, and carriage would be less than 50 per cent., leaving a gross profit of over 50 per cent. The quantity which can be produced is only regulated by the number of workmen and lathes employed. The profit upon other articles of electrical pottery is almost or quite equal to that of insulators, while the manufacture of artistic tiles and pottery will also yield large additional profits. The erection of the necessary buildings, machinery, &c., can be completed within three months, when the manufacture of the insulators, &c., can be at once commenced.

The National African Company with a capital of 1,000,000, in shares of 100 each, has been formed to purchase for 250,000 (in deferred shares not transferable for three years) the goodwill and business of the United African Company established by them and their predecessors during a long course of years in Central Africa, and in and about the rivers Niger and Chad. The National African Company proposes to develop the business and open trade throughout the fertile, populous, and settled countries of the Central Sudan, a region extending about 2000 miles from east to west, and 500 miles from south to north, which has hitherto been practically untouched by European trade. It is pointed out in the prospectus that it is manifestly to the advantage, both of the public and of the vendor company, that the capital sufficient to completely fill up all openings to trade should be in one business, instead of being divided among a number of small companies, whose aggregate working expenses and risks would be enormously increased, and no one of whom could command the influence which would be possessed by one powerful company under a sole direction. The Quorra or Niger (some 3000 miles in length), and the Binué or Chadra communication between Europe and the Central Sudan. The vendor company state they have found that, in ascending the river, gross barter profits rise in proportion exceeding the increase of working expenses; that as operations have been extended, the proportion of expenses has diminished, and that thus large profits may be earned in cases where a small company could only trade at a loss. They recommend obtaining extensive concessions from native potentates and promoters, of securing every position where trade can be profitably carried on, by the present company has been or will be paid, and the only expenses to be borne by the company will be those incident to the formation of the present company, and the issue of shares, brokerage, &c., but which the vendor company guarantee shall not exceed 30000, in the whole.

The Newfoundland Railway are offering, through Messrs. Melville, Evans, and Co., 400,000, of their Six per Cent. First Mortgage Land Grant Bonds (Southern Division) at 98½ per cent. The company was incorporated to construct a line from St. John's to Harbor Grace, and thence to Hall's Bay, the centre of the mining industry, a total distance of 340 miles; the southern division comprises the 100 miles between the two first-named places; of this about one-third is the mineral wealth of Newfoundland is beyond question. The term of the bonds is 50 years, and they are secured by the annual cash subsidy attaching to this division, equal to 108½ per mile, to be paid by the Government of Newfoundland to the railway company for a period of 35 years on the terms of the contract for construction, with the Government, amounting on this section to 18,8000, per annum by a first lien on 100 miles of railway forming the southern division, 20 miles of which are already built and accepted by the Government, all rights and franchises of the company appertaining thereto, including valuable freehold land and wharf property at St. John's; and upon the Government of Newfoundland grant in fee simple to the railway company of 5000 acres of land for each one mile of railway completed, aggregating on this division 500,000 acres. The proceeds of the sale of land are to be applied to the redemption of the bonds by purchase at the current market price, not exceeding 100 per cent.; or, if such purchases cannot be effected, by drawings at 120 per cent. The bonds drawn will be payable on the next half-yearly day of payment of interest; and the interest thereon will then cease. The bonds will be accepted by the company at 120 per cent. in payment for lands, and any bonds so received by the company will be cancelled. The Government of New-

foundland have under the Act power to purchase the railway at any time after 35 years, at a valuation, the said railway and property to be then vested in her Majesty, subject to all bonded and other indebtedness of the railway company at the time of valuation. The estimate of returns and expenses shows that (exclusive of the Government subsidy, which is itself equal to more than two-fifths of the interest on this issue) there will be a good surplus after paying full interest to the bondholders.

Devon Great Consols, 5½ to 6½; shares have been flatter, owing, it is said, to a large number of shares having been thrown on the market, but are likely to advance as these shares become absorbed. The 190 has improved, and the sales of ore are increasing, that on May 18 being 907 tons of ore, which realised 1277½, whilst that on June 22 was 934 tons, realising 1603½, and the sale on Thursday last of 925 tons of copper ore realised 1898½, thus showing a considerable increase on the two previous sales. Devon Great United, ¾ to 1; the erection of rock-boring machinery is being pushed forward.

South Devon Copper, 1 to 1½, and in demand; the agent reports that the 110 east continues to improve, and some important discoveries are expected in driving this level eastward, which is fast approaching the point where in the level above the lode was valued at 1200 to 1500 per fathom. The 80 has also improved. Satisfactory progress is being made at Pickstone's and Martin's shafts, and the portable engine is now fixed at the last-named shaft.

Drakewalls, ¾ to 1; the south branches at the deep adit are opening up valuable tribute ground. A sale of tin will be made next week. Cooks Kitchen, 37½ to 38½; the balance shown at the meeting of shareholders on Thursday last amounted to 1649½. South Wheal Frances, 12 to 13; and in better demand, the recent accident to the machinery being very slight and quickly remedied. West Wheal Seton shares have advanced to 18½ to 19½, and in good demand, owing to improvements in the bottom of the mine. Kit Hill, ¾ to 1; but slow progress is being made, as will be seen by your agent's report, only 3 fms. have been driven during the past week.

Gunnislake (Clitters), 2½ to 3; mine opening out well, and the sale of copper ore realised on Thursday 2945½.

Frontino and Bolivia, 2½ to 3; the dividend warrants, 1s. per share, were sent out this (Friday) evening. The meeting on Wednesday passed off, on the whole, satisfactorily, as it ended with a unanimous vote of thanks to the managers and to the Chairman. That an enormous amount of money has been expended on the property was admitted by the Chairman, but he pointed out that this was in fact the mine providing the capital for its development. Messrs. Seal and Sutherland deserve the thanks of the shareholders for having demonstrated that there are at least some shareholders who take an interest in the concern. That a company with 110,000 of capital, and which has obtained 319,2300, worth of gold from its mines, together 429,2300, should have paid only about 25,000, in eight years as dividends to the shareholders affords reasonable cause for complaints; but it may be assumed that the Chairman has satisfied the opposition that a different system will now be pursued, and that a fair proportion of the working profit in future will be distributed as dividends. It is cordially hoped that this 400,000 expenditure has placed the property "in a position of permanent prosperity and stability," and that henceforth the promised profits will be regularly forthcoming. Mr. White states that in 15 months, that is from November, 1883, a profit of 50000 may be hoped for. If regular progress toward this figure be not made no one can complain if the shareholders replace the entire executive in England and at the mines, and seek more efficient officers.

South-East Wynaad, 3 to 3½; the first letter from Mr. Cooper after his arrival at the property has been received. He (June 23) writes:—"I was agreeably surprised to find the lode so much improved in the south drift No. 5; it is now 7 ft. wide, full of pyrites. The lode is making well, both in the rise in the back of this level, also in the winze at bottom. We have been obliged to temporarily suspend the latter, the heavy monsoon having caused a great influx of water; I trust it will not be for long. We have crushed about 200 tons with our 12-head battery, and are crushing 12 tons per day. The first 100 tons was very poor stuff, as we wanted to have everything in order before crushing good stone. We clean off the amalgam every day or two. I got back here on Sunday after a very rough and fatiguing journey from Ootacamund. We had a break in the monsoon on Monday, Tuesday, and Wednesday, but it has come on again in full force. One good thing it does not hinder us in working underground except in No. 2 winze nor in crushing. It would appear, therefore, says the secretary, that the 132 tons dressed, details of which were published on the 6th inst., might have contained 100 tons of very poor quartz. As we hear by telegram that crushing is regularly going on, the clean up of a further parcel may very shortly be expected.

Nouveau Monde, ¼ to ½; news has been received from Venezuela that the title to the Nacupai mining property is in perfect order, and full instructions have been sent by mail which left early in the month to complete the purchase, and draw upon Messrs. Barings for the funds which had been placed some weeks ago in their hands (40,000), by a powerful syndicate, which has also provided the necessary working capital (20,000), to commence working, pending formation of the new company, in which the shareholders of the old company will have a very substantial interest, one that will reward them for their patience during the last few years, and in all probability insure them a return of all their money. Of the value of the property there is not the remotest doubt, and so extensive is it, that three, four, or more sets may be sold off, and probably will be, at prices which will recoup the bulk of the capital of the new company. In addition to this, an entirely new process of smelting is now being patented (which will be offered to the new company) that will enable them to make returns, not only on a larger scale but at a less cost than hitherto made by gold mines. It is predicted that there is a great future for the property.

La Plata, 2 to 2½; the smelting statements for the last two weeks have come to hand together. Combined they show—ore purchased, 1909 tons; smelted, 2097 tons, which produced 47,976 ozs. of silver and 353 tons of lead. The value of the fortnight's consignments was 17,066½. A circular issued by Mr. W. Abbott to the shareholders will be found in another column.

Richmond, 7½ to 8½; the telegrams for the last two weeks show that the fortnight's run was 842,000, from 880 tons of ore, with one furnace. During the fortnight the refinery produced doré bars to the value of 835,000. The superintendent's weekly report will be found in another column.

Ruby and Dunderberg old shares, 2 to 2½, new 1 to 1½ premium. The weekly report advises fair progress in the developments in the Dunderberg Mine. No. 8 ore body, below the 700 ft. level, is still being prospected in various places, but until the main shaft has been sunk and a drift run to come under this ore body it is not available for stopping purposes. The ground in which the shaft is being sunk is at present rather hard; the progress, therefore, has not been as great as was expected. The drift in the 300 ft. level, towards the Home Ticket lode, is being continued, and the last account mentions that the indications for ore are more favourable.

Eureka (Nevada) Silver, ¾ to 1; work in the Bald Eagle Mine this week has been concentrated on the winze from the east cross-cut (150 ft. level) south drift. This has been advanced 15 ft. in low grade ore, interspersed with bunches of good ore. The usual quantity of ore has been stopped from the Williamsburg, and 25 tons are now awaiting shipment.

The California Gold Mine Company have received a telegram, dated July 18, which says:—"Machinery started to-day." This, it is explained, refers to the new 100-horse power hoisting machinery fixed over the main shaft, which is down 1300 ft. The reserves of ore in the mine are very large, and Mr. Rickard estimates those in sight are equal to four years' supply. The old machinery was insufficient to hoist the produce available, and the works were, therefore, temporarily suspended to allow of the erection of the new plant which has just been completed, and which will work the mine down to a depth of 3000 ft. Now that the mine is in full working order the directors will soon be enabled to announce the resumption of mining. During the time required for the constructions of the machinery the 50 stamps mill has undergone a thorough overhauling.

The Bell Copper Mines, to the formation of which with a capital of 250,000, in shares of 10 each reference was made in last week's *Journal*, and whose prospectus appears in another column, is understood to have been well received by capitalists, a large number of applications having already come in. It may be mentioned that Mr. A. Brand, for several years manager of copper mines in Newfoundland, is the present manager of the Bell copper mines at Lake Superior, and Messrs. Bainbridge, Seymour, and Rathbone will be the London managers.

In Lead mine shares there has been very little doing, the price of lead and lead ore remaining very low, although tin and copper occupy a good position. Great Laxey, 17½ to 18½ ex-div. of 6s. per share, payable on Wednesday next. Minera, 8½ to 9½, and enquired for. A correspondent writes that with the present large sales of blende and lead ores he cannot understand how it is that larger dividends are not paid regularly every quarter, and suggests that some change should be made in the directorate and management of affairs.

Van, 5 to 6; the mine is said to be looking better. Roman Gravel, 8½ to 9½, and in demand. The agents report this week, from their inspection, that they consider the mine to be opening out well. The 80 end south is only now beginning to enter the long rich run of ore ground seen in the 65 above, and so far as this end is opened out it is worth 5 tons of lead ore per fm. Satisfactory progress is being made with the erection of the rock-boring machinery, which will shortly be at work. The sample on Thursday last was 250 tons of lead ore, and 60 tons of blende will be sampled.

Tankerville Great Consols, ¾ to 1, and enquired for owing, no doubt, to the important improvements and discoveries which have been made during the past week, as will be seen by the agent's report in another column. They have sampled 100 tons of lead ore, for sale next week, and a further quantity will be sampled next month, as well as blende. The usual sampling of blende, the agent states, will be made next week. The shareholders will be glad to notice that the bottom of the Bog Mine will be drained shortly, where it will be remembered there was a very rich lode of lead ore, reported at 3, 4, 5, and up to 6 tons of lead ore per fm. Every effort is being made to approach these points as quickly as possible, as well as to get another level under this rich run of ore ground; when the return of lead would be considerably increased from this part of the property. In the meantime the returns will be gradually increased from the Pennerley, Potter's Pit, and Tankerville Mines. The surface operations, new dressing floor, &c., are being pushed forward as quickly as possible. The rock drills are reported to be working well and doing good duty in laying open a further quantity of ore ground.

Leadhills, 2½ to 2¾, and in demand, owing to the improved prospects of the mine. The new machinery is working well at Wilson's shaft.

The Railway Debenture Trust Company (Limited) notify that the coupons on their Five per Cent. Debentures, due August 1 next, will be paid on and after that date at the banking house of Messrs. Glyn, Mills, Currie, and Co.

The Council of Foreign Bondholders notify that the report of Sir G. Kellner, K.C.S.I., and Mr. G. Bush, recently sent to Costa Rica to enquire into the financial position and the condition of the railways of the republic, is now printed, and copies can be had on application at the office of the council.

Telegraphic advice has been received by the London branch of the Australian Joint-Stock Bank of the declaration at Sydney of a dividend and bonus equal to 12½ per cent. per annum for the half-year ended June 30: 50000, has been added to the reserve fund, which now stands at 130,000.

Messrs. C. de Murrieta and Co. announce the numbers of 112 bonds amounting to 29,700, of the Buenos Ayres Six per Cent. State Loan, 1870, which will be paid off at par on Oct. 2 next.

The British Silver-Lead Mining Company's property has, it is stated, been carefully examined by well-known qualified experts, who state the set is very extensive, and traversed throughout by masterly lodes, embedded in the most congenial stratification to be met with for producing large quantities of rich silver-lead ore, bearing nearly east and west, with a northerly underlie, which are the true characteristics of productive lodes, so that whether considered from a geological or physical point of view, it is so favourably situated as to leave nothing to be desired.

INDIAN KINGSTON AND SANDHURST GOLD MINING COMPANY.—This case came on for hearing in Mr. Justice Kay's Court on Friday, and on application the hearing was ordered to stand over, in consequence of the company being unable to find Mr. Oliver Pegler, whose report on the estate had been impeached. Several strong affidavits have been filed, and we may expect to hear some startling revelations.

TANKERVILLE.—The north lode in the 232 has been cut through, and found to be 8½ ft. wide, worth 30 cwt. per fathom. The stopes in the 220 are valued at 2½ tons. At Pennerley the 120 west, on Warm Water lode, is worth 15 cwt., and the 80 west 30 cwt. At Potter's Pit, No. 1 winze is worth 20 cwt., and No. 2 winze 30 cwt. The 105 south is valued at 20 cwt. At Bog, different places are producing lead and blende, and improving. They have sampled 100 tons of lead ore from the three mines, which are altogether looking materially better.

PRINCE OF WALES SLATE QUARRY, CARNARVONSHIRE.—A report on this property by an experienced quarry manager has just been obtained by the directors, and they have decided to sink a vertical shaft in the slate vein to a depth of 47 yards below the No. 5 floor, and to drive a cross tunnel for 25 yards from the bottom of the shaft; this will give sufficient depth for three floors of 15 yards each. This work has been commenced.

The directors of the Brush Electric Light and Power Company of Scotland (Limited) have appointed Mr. F. M. Brockbank as secretary to the company.

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LEAD ASHES SULPHATE OF LEAD, LEAD SLAGS,
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FOR SALE.—50 Akankoo, 7s. 6d.; 50 Bratsberg Copper, 28s. 6d.;
50 English-Australian Gold, 7s. 6d.; 100 Eschequer Gold,
2s. 9d.; 50 Gold Coast, 21s. 6d.; 100 Prince of Wales, 6s. 6d. Each
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THE SLEEPY HOLLOW GOLD MINE, GILPIN COUNTY, COLORADO.

Has been reported upon by THOMAS RICKARD, Esq. (Messrs. Rickard Bros.), Mining Engineers, Queen Victoria Street, who states: "I confidently recommend this property as one of the most promising young gold mines in Gilpin County, and as one which, with very moderate outlay and in a very short time, promises an excellent result."

E. LE NEVE FOSTER, Esq., M.E., who writes: "In conclusion, I can state that from the general character of the lode, its resemblance to the Flako and its undoubtedly being an extension of that valuable lode, together with the locality in which it is situated, render it, in my opinion, a valuable piece of property and, one which, with the expenditure of a small working capital in a judicious development and with economical management, may hereafter be expected to make its mark in Gilpin County."

Mr. PHILIP MILFORD, Birmingham, who has been selected as Resident Manager by the Directors, and who states:—

"In looking over Mr. Foster's report I notice he charges all expenses against the mill ore, leaving \$3 profit per fathom from that alone and, leaving all the smelting ore, of which there is a large percentage, and estimated at \$70 per ton, as additional profit. On the basis of his estimate, and assuming that only 7 fms. a day are extracted, equal to 23 tons of mill dirt, the proportion of smelting ore would be, according to past record, 4 tons. I make the following calculation of expected results:—7 fms. of mill dirt, at \$8, \$56; 4 tons of smelting ore, at \$70, \$280; daily profit, \$336. Yearly profit on a working of 300 days \$100,800, or £20,160."

THE SLEEPY HOLLOW GOLD MINE (LIMITED).

Incorporated under the Companies Acts, 1862 to 1881.

CAPITAL £50,000, IN 50,000 SHARES OF £1 EACH.

Of which are reserved for vendors, 13,000 Shares; and subscriptions are invited for 22,000 Shares; total on which dividends are to be earned, £35,000.

On the issue of 22,000 Shares of £1 each, payments are to be made as follows:—2s. on application; 3s. on allotment; 5s. one month after allotment; the balance in calls not exceeding 5s., with not less than one month's notice.

DIRECTORS.

W. MOLESWORTH ST. AUBYN, Esq., M.P., Brick Court, Temple, Director of the Safety Blasting Powder Company (Limited); EDWARD PALMER, Esq., Director The Howe Machine Company (Limited); East Hony Mining Company (Limited); JOHN ROMANES, Esq., Director Organic Gold Mining Company (Limited); New Emma Silver Mining Company (Limited).

BANKERS—ROYAL EXCHANGE BANK (Limited), 75, Cornhill.

SOLICITORS—Messrs. SNELL, SON, and GREENIP, 1, George-street, Mansion House.

AUDITORS—FREDERICK PRYCE, Esq., 2, Pinners-court, Old Broad-street.

CONSULTING ENGINEERS—Messrs. RICKARD BROTHERS, Queen Victoria-street, London; and Denver, Colorado.

RESIDENT ENGINEER—Mr. PHILIP MILFORD.

SECRETARY AND MANAGER—H. R. LEWIS.

OFFICES—BARTHOLOMEW HOUSE, BARTHOLOMEW LANE, E.C.

Full Prospectuses and Forms of Application for Shares can be obtained at the Bankers, the Solicitors, and at the Offices of the Company.

REPORTS ON THE SLEEPY HOLLOW GOLD MINE, GILPIN COUNTY, COLORADO, U.S.A.

THOMAS RICKARD, Esq., M.E.

Messrs. Pearce, Sands, and Foster, who have preceded me in the examination of this mine, have so minutely described it that I may omit a good deal of the technical details otherwise necessary. The concessions or locations of this property cover a length of 1400 ft. of lode; for 500 ft. there is a United States patent, or absolute definite grant, and for the rest there is the usual recorded location and discovery certificate to be followed by the patent. The mine is placed in communication with the smelting works by a railway (Colorado Central), which runs hard by, and with stamping mills by a good carriage road. Being in Gilpin county, and quite near the Gregory, the Bobtail, and the Flako, the position is unquestionably most desirable. These mines have all been, and still are, rich producers, and they are developing rich at great depths. The Sleepy Hollow mine is on the same lode as the Flako; indeed, it is fairly described as the eastern extension of this rich mine. The mine workings are simple, being one shaft sunk 375 ft., from which at different levels the 125th, the 150th, the 300th, and the 375th horizontal drifts have been extended to lengths varying from 20 to 70 ft. This is the work of tributaries by whom the mine has been held on lease. The character of the lode in its general make-up is identical with that of the majority of the most productive mines of the district, and particularly with that of the Flako. It is a regular and well-defined fissure, 2 to 2½ ft. wide, in a good formation, the almost horizontal benches of which it cuts with an angle, deviating only a few degrees from the vertical. The "paystreak" or ore lode is quartz, with iron pyrites impregnations containing gold and a subordinate quantity of silver.

The lode, regular and more or less ore from the outcrop, first showed ore in paying quantity at 250 ft. from the surface; and the section and the record of the mine show that from that depth to the present bottom the proportion of good stoppage ground has been large and increasing. The average grade of the ore is also very good; in fact, it is superior to that of most of the neighbouring mines. The ore is what is known as free-milling stuff—that is, it is taken directly from the mine to the stamping mill without the intervention of any mechanical or other treatment whatever, except the mere sorting of what is called the smelting ore. This richer ore is massive, or almost massive, iron and copper pyrites and zinc blende, which is found to yield a better commercial result by sale to the smelters than by milling. Of such ore the yield is about 18 per cent. of ore produced, and its value averages about \$70 a ton. Both in point of quality of the ore and the cost of mining and carriage the conditions of this mine are favourable, for while the great mass of the place make their profits from stuff yielding \$15 a ton (the average free-milling and smelting ore together) and at a cost of \$5 to \$8, the Sleepy Hollow has shown an average of nearly \$20 a ton.

The Sleepy Hollow is unquestionably a piece of ground possessing excellent capabilities. What is required to make it what the Flako is, and to all appearances as profitable as the best mines of the same locality, is that adopting a complete plan of working and rearing the mine from the unsatisfactory and, I may say, destructive leasing system it be opened out fairly and in a miner-like way, and the present altogether inadequate horse appliances be replaced by suitable (25 horse-power) steam hoist with cage, and cars to which the shaft, with slight alterations, is suitable.

The shaft should be sunk without intermission to a depth of from 600, or better still 800 ft. from the surface. It is about the 500th and 600th levels in the mines of this locality where the richest ground has been met with. The ground is "easy," and, with suitable hoist proposed, sinking to the 800 ft. level is the work of about a year. Judging from the facts respecting the locality, nature of the lode, the records of the mine, &c., this, with the necessary drifting work, can hardly fail to result in great discoveries. As stated by those who have preceded me, £4000 to £5000 will be found to be sufficient capital to carry out the proposed developments. £1000 would about provide for the hoist, cage and cars, and the preparatory work in and about the shafts, &c.; and the 425 ft. of shaft and the accessories in drills, &c., would be amply provided for by the balance. No water is to be expected, for the Flako, now at 900 ft., is practically a dry mine. I confidently recommend this property as one of the most promising young gold mines of Gilpin County, and as one which, with very moderate outlay and in a very short time, promises an excellent result.

THOMAS RICKARD (Rickard Bros.), 35, Queen Victoria-street, E.C.

London, Dec. 16, 1881.

ERNEST LE NEVE FOSTER, Esq., M.E.

The property known by this name is situated in Gregory Mining District, Gilpin County, Colorado, a short distance above the town of Black Hawk. The district is an old and well known locality, and noted for its large yield of gold. The Sleepy Hollow lode is in the immediate vicinity of, and nearly parallel with, the well-known Bobtail lode, which has for many years past been worked to a great profit, and is now upwards of 900 ft. deep, the best and largest bodies of ore being found at that depth. The Sleepy Hollow is, without doubt, the easterly extension of the Flako lode, which at different times has produced very largely and been worked very profitably. The two properties adjoin, there being only about 150 ft. of ground from the Sleepy Hollow shaft to the boundary of the Flako. The Sleepy Hollow has always been worked to a great disadvantage, as no power other than horse has been employed, and the shaft has never reached a depth that makes it too expensive to sink it further by this means, and, before the mine can be worked extensively, steam power will have to be employed. There is no doubt that this lode is a true fissure vein, as it is enclosed between gneiss and mica schist rocks, the stratification of which is nearly horizontal. The developments upon the property consist of the main shaft, sunk to a depth of about 300 to 325 ft., a drift driven east from the bottom about 100 ft., the back of which is stope out nearly 60 ft. high. There is also, at a depth of about 275 ft., a level driven west about 40 ft., in the back of which no stope has been done. There is good ore in all the lower workings—that is to say, from a depth of about 250 ft. to the bottom, and everything seems to indicate that, as greater depth is attained the ore body will become more regular and solid. The ore consists of a quartz vein impregnated with auriferous iron pyrites, from \$ to 15 in. in width. This is a good free milling ore, and along with this occurs a vein of auriferous iron pyrites, copper pyrites, and zinc blende, from 1 to 10 inches in width, which can be saved separate from the milling ore and sold to the smelter. The average yield of the ore I have calculated from the actual mill returns, as they are much more reliable than any samples which could be extracted in an examination, and I find as a result that the milling ore yields about 5 ozs. gold per cord, and the smelting ore contains about 2½ ozs. to 3 ozs. gold, 30 ozs. silver, and 7 per cent. copper, per ton, worth about \$70 00.

I have also, as a check on these mill returns, assayed several samples I myself took from different parts of the mine and these yielded as follows:—
No. 1 30 ozs. gold 34 ozs. silver 9 per cent. copper.
No. 2 2 13
No. 3 15-10th 22 5 per cent. copper.
No. 4 1 15
No. 5 02 10th 2
No. 6 Trace 1
All of which agree very well with the general run of the ore.

The cost of working the mine should not be exceedingly heavy, for the ground is easily worked and the communications are excellent. There is a wagon-road to the mine and the Colorado Central Railroad runs within a few hundred feet of the main shaft; thus coal for the boilers can be delivered very cheap. The ground on the lode is such that levels can be driven for \$7 per foot. The shaft can be sunk for from \$15 to \$18 per foot and stope is worth about \$15 per fathom. Thus a calculation shows that if the vein of milling ore is 9 in.

wide it will yield about 3-5ths of a cord of mill dirt per fathom, which, at an average yield of 5 ozs. the cord, would contain 3 ozs. of gold, worth about \$15 per oz., or altogether \$45.

The cost of extraction of a fathom of ground I estimate as follows:—
Stopeing 1 fm. \$15 00
Hoisting to surface and tramming 1 00
Handling ore at surface, &c. 5 00
Hauling ore to mill 3 00
Milling at \$15 per cord 9 00
Proportion of dead work, drifting, and shafting 4 00
Sundry expenses 3 00
Total cost \$40 00

Leaving a net profit of \$3 per fathom of ground stoped, exclusive of any profit that arises from the saving of the smelting ore, almost the whole of which would be profit, as the cost of extracting it has all been charged against the mill ore. Timber for mining purposes is obtained about two miles from the mines, but can be delivered at a very reasonable cost, and supplies of every kind are obtainable with ease and at moderate prices. The facilities for the treatment and disposal of the mine's produce are as good as can be desired. There are at Black Hawk and Central City a number of stamp mills, which do custom work and reduces the milling ore to metal. The competition among these is so great that the work is done at a minimum cost, and the product handed over to the owner. The present price of milling is \$15 per cord, but it is probable that during the coming summer the same work will be done for \$10 per cord.

The mine, however, before it can be expected to be worked to a large profit, requires a great deal of development and facilities for getting the material out of the mine as well as for handling it when extracted, and, for this purpose, a working capital of at least \$20,000, preferably \$25,000, or more should be provided. With this working capital, machinery could be erected at the main shaft, and the mine placed in good working shape by driving levels and sinking the shaft so as to open up as much stoping ground as possible. The sinking of the shaft is a most important piece of development, for it is well-known in that district that but very few of the mines begin to pay, except in the surface portion of the shaft, and sink to 200 to 300 ft. is attained, and all the best mines at the present time are very much deeper. In conclusion, I can state that from the general character of the lode, its resemblance to the Flako and its undoubtedly being an extension of that valuable lode, together with the locality in which it is situated, render it, in my opinion, a valuable piece of property; and one which, with the expenditure of a small working capital in judicious development and with economical management, may hereafter be expected to make its mark in Gilpin County.

Georgetown, Colorado. ERNEST LE NEVE FOSTER, Mining Engineer.

Mr. PHILIP MILFORD.

48, Priestley-road, Birmingham, June 1, 1882.
In pursuance of your request I submit as follows:—I have estimated that the following sums are amply sufficient to develop the Sleepy Hollow Mine and make it profitable to all concerned:—For portable engine and boiler, sufficient to work 700 ft. deep, 24½ h.p. for grading and building shafthouse, 1500; for hoisting gear, rope, buckets, belting, and tools, 2600; sinking shaft 300 ft., at \$12 per foot, 3600; drifting four levels (each 200 ft. each), at \$7, 11200; total, 24900. As the shaft is sunk right on the vein, we should be taking out ore all the time this development is going on. In proof of this assertion I may call your attention to the fact that rich ore is in all the lower workings, and the last ore, taken from the bottom of the shaft, and milled at Bostwick mill, yielded 7 ozs. 18 dwts. of gold per cord, or 7 tons, which is far above the average run. I believe the ore taken out whilst the mine is being opened up as above would pay for all contingencies, top work, &c. With the shaft deepened 300 ft. and levels driven, I believe I am perfectly safe in saying we could turn out four cords, or 23 tons, of mill ore per day, which, judging by experience of the mine up to the present, would yield 21 ozs. of gold, value 630. In addition to this, past experience also proves that the proportion of smelting ore, as compared with the mill ore, is over 1 ton of smelting ore to one cord, or 7 tons, of mill ore; and the value of the smelting ore is on an average 14½ per ton, or \$64, daily from the smelting ore. Add the mill ore to the smelting ore and we have a daily output of 1½ per day. The expense of stoping, hoisting, hauling to the mill, and milling the above quantity of ore in the in Gilpin county would not exceed 36½, which would leave a daily profit of \$37. This could be increased in proportion to the further extension of the workings. One of the great advantages of the Sleepy Hollow Mine is that it is entirely free from water, which allows of its being worked both day and night. Experience has taught that all Gilpin county veins increase in size and richness as depth is gained; and it cannot be disproved that there is hardly a deep mine in the county that is not producing handsomely.

A very significant fact regarding the Sleepy Hollow Mine is this: The Flako lode (of which the Sleepy Hollow is an extension) dips easterly; and, according to the dip of the lode, I have every reason to believe that in sinking Sleepy Hollow Shaft 150 ft. or so deeper we shall strike the same pay streak from which the owners of the Flako took out bullion to the amount of nearly half-a-million dollars.

In looking over Mr. Foster's report on this Sleepy Hollow Mine, I notice he charges all expenses against the mill ore, leaving \$3 per fathom profit from that alone, and leaving all the smelting ore (of which there is a large percentage, and estimated at \$70 per ton) as additional profit.

On the basis of his estimate, and assuming that only 7 fms. a day are extracted, equal to 23 tons of mill dirt, the proportion of smelting ore would be, according to the past record, 4 tons. I make the following calculation of expected results:—7 fms. of mill dirt, after deducting all expenses, at \$8, \$56; 4 tons of smelting ore, at \$70, \$280; daily profit, \$336. Yearly profit on a working of 300 days, \$100,800, or £20,160.

Mr. R. H. Lewis. PHILIP MILFORD.

Notices to Correspondents

TELEGRAPH ENGINEERS—"J. A. B." (New Bridge-street)—The report of the visit of the Society of Telegraph Engineers and Electricians to Chatham was in type for last week's Journal, but accidentally omitted; it will be found in another column.

NEW WEST CARADON—"W. M."—The purser is Mr. John Watson, and the address Gracechurch-street Buildings.

Received—"W. C. K."—"A. P."—"C. C. B." (Birmingham)—"W. T." (Schull)—"Novice"—"G. H." (Richmond) should write to the parties he names, and endeavour to procure some information—"J. R. H." (Oathie)—"Shareholder" (West Pateley Bridge)—"Shareholder" (Richmond)—"T. E. G."—"J. H. J."—"T. A. R."—"One Interested" (Bangor): All the information we receive is published in the Journal.

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, JULY 22, 1882.

THE ECONOMY OF FUEL IN THE PRODUCTION OF IRON

In looking back even for a few years one is surprised at the great economy which has taken place in the consumption of fuel in the production of both iron and steel. The great waste which at one time took place without any attempt to diminish it was something surprising, but as the price of coal increased ironmasters began to direct their attention to the best means of reducing the expenditure to a minimum. Indeed, the smelting of iron presents the most remarkable illustration of the extent to which fuel is now economised as compared with former times. According to Mr. MUSHET, at the Clyde Ironworks in 1796 no less than 9 tons 10 cwt. 24 lbs. of coal were consumed for the production of 1 ton of pig-iron, and 30 years later on it had only fallen to 8 tons 1 cwt. Since then, however, the reduction has been of a marked character, whilst there is still room for more being done in lessening the consumption of fuel in the blast furnace. The Cleveland ironmasters have undoubtedly been the foremost in trying various methods for diminishing the quantity of fuel in the production of pig, for whilst in 1864 the quantity used in making a ton of iron was fully 70 cwt., now it only averages about 42 cwt. Still, a great deal depends upon the quality of the ironstone smelted, for the higher the metallic richness the less fuel required. As regards the hematites of Cumberland and Lancashire, there being a high percentage of metal, the coal or coke required is, of course, much less than with respect to the ordinary ore peculiar to the coal measures or that obtained from the oolites. So far back as 1866 in Cumberland 32 cwt. of coke was the average for making 1 ton of pig, but now the same object is attained with about 24 cwt. In a great measure this is due to the improvements that have been made in the furnaces and the utilisation of the gases by means of close-topped furnaces. But it may also be said that a good deal depends upon the description of coal that is used, but in some instances this is not taken into consideration by some of the iron-makers. In South Wales, for instance, where there is good smelting coal and the stone may be taken as giving at least an average of 30 per cent., the consumption of fuel is equal to 42 cwt. per ton of pig, whilst in Durham and Northumberland, where the ironstone is scarcely so good, and the coal by no means superior, the fuel used is not more than 48 cwt. In connection with the stone that is raised entirely away from any coal field, such as that worked in Northamptonshire and Lincolnshire, no progress of any consequence has been made of late years in reducing the quantity of coal in the making of pig-iron. This is all the more singular, too, seeing that there is a considerable charge for taking the coal by railway to the furnaces. In fact, so far as

Northamptonshire is concerned, more coal has been used per ton of pig of late than was the case 5 or 6 years ago, although it has to be taken a distance of 50 or 60 yards, so that if economy was to be practised at any place one would think it would be in that county. The ores are raised in the oolites, and are much richer than those of Lincolnshire, some of them giving as much as 40 per cent. of metallic iron, yet they cannot be smelted with less than 50 cwt. of coal to the ton of pig. A great deal of the iron made in Derbyshire is from the Northamptonshire stone yet in that county about the same quantity of coal is used, but as coke is now being imported into it from South Yorkshire we believe that not so much coal will now be required.

One of the oldest iron districts in England is Coalbrookdale, in Shropshire, where the coal field is nearly exhausted, and here, singular to say, the consumption of fuel is about the highest known in the manufacture of iron, being more than 50 cwt. to the ton, although its growing scarcity one would think would cause it to be carefully nursed, but many of the furnaces are of an old type, whilst the coal itself is not particularly good. More attention, however, has been paid to the economising of fuel in the making of iron in Lincolnshire than in most districts, and in the close-topped furnaces using Durham coke the quantity required in the making of a ton of iron was 24 cwt., and sometimes even less than that; but now most of the coke used is that from South Yorkshire, and the quantity required is about 30 cwt., but as the quality of the fuel from the district named has been greatly improved of late, a less quantity is now required. But the ironmasters of that district are now considering the desirability of having close-topped furnaces, which they consider are both theoretically and practically the best as regards the utilising of the gases and the consequent economising of the fuel required for smelting. Of late years the coal consumed in North and South Staffordshire in the making of iron has not undergone much change, ranging from 39 cwt. for the best qualities of stone to 45 cwt. for the inferior descriptions. But a change is now likely to take place with regard to the production of iron by the direct process, which is about to be introduced in the county. Lancashire appears to enjoy the position of consuming the best quality of fuel in the production of iron, the stone being good hematite, and the coke of a good quality, great care being taken in having the raw material from which it is made well cleansed by washing, whilst the ovens are amongst the best, some being made on the Coppee principle. It is, therefore, evident that in the economising of fuel for smelting a great deal depends upon the quality of the raw article, and its preparation before being put into the coke ovens. At the works of the Barrow Hematite Company, where there are about the greatest number of furnaces in the kingdom, a great deal of coke is made at one of the mines belonging to the company in the West Riding, and it is thoroughly cleansed by one of Shepherd's patent washing machines, which frees the coke from all impurities, and consequently gives a good average of duty; and were the same care taken in other districts, there would be a considerably less quantity of fuel required for producing a given quantity of iron. In Scotland very little change has taken place of late years, the fuel required now being about 47 cwt. of ordinary coal. In conclusion, it may be said that the North of England has taken the lead in the introduction of all economical appliances and methods in the manufacture of iron, and amongst those to whom the greatest credit is due may be mentioned Mr. ISAAC LOWTHIAN BELL and Mr. RICHARDS, and Mr. GJERS. The latter, we are told, has estimated that in the Cleveland district the economy of coke consequent upon the increased heat of the blast has been equal to 10 cwt. to the ton of iron produced, whilst a saving to about the same extent has been made by the enlargement of the furnaces. From the returns received at the Mining Record Office it appears that since 1874 there has been a decrease of 11 cwt. of coal per ton of pig produced, whilst our last year's make would represent a reduction of 4,607,550 tons of coal. Mr. JEANS, the secretary of the Iron and Steel Institute, also states on the authority of a gentleman well qualified to give an opinion, that the difference at the present time between the average consumption of coke in a furnace working the Cleveland ore and a furnace using hematite ore will not be less than 5 cwt., while Mr. BELL has calculated that if 22 cwt. of coke be assumed to represent the consumption of coke per ton of No. 3 Cleveland iron, the quantity of coke consumed in smelting the same quantity of metal on the West Cumberland coast should not exceed 18 cwt. However, the practical limit of the economy of fuel in the manufacture of iron has by no means yet been reached, but will be found to go on by increased temperature of the lining and the pressure of the blast. The direct process we believe will also result in an immense saving of fuel and in the production of a superior quality of malleable iron, whilst there will also be the great economy in having the steel produced by one operation. We are evidently on the eve of great changes, all of them going in the direction of lessening our requirements of coal, and so keeping our reserves of the fossil fuel to a much much longer period than many of our ablest geologists and scientists have estimated. Our consumption of coal has been increasing at an astonishing rate during the last two or three years, but we believe the time will shortly arrive when the tide will turn and the demand cease to increase by existing and new discoveries and economising appliances.

MINERS' PERMANENT RELIEF FUNDS.

THE HARTLEY AND OAKS SURPLUSES.

It is admitted that the establishment of miners' permanent relief funds in different parts of the kingdom has been the means of effecting a vast amount of good—placing the workmen, by means of a small weekly subscription, in a position by which they are independent of public or parochial aid when unable to follow their employment, and, in the event of their deaths, securing a provision for their families. The mineowners are also liberal contributors to these funds, in which they take a great interest, so that the combination of masters and workmen, so far, has been successful in raising funds to meet the many demands that are made upon them by the aged, the sick, injured, and the families of those who die from natural causes, or who are killed whilst following their ordinary employment—at all times a dangerous one. It was thought that the carrying out of the Employers' Liability Act would seriously affect the position of the permanent relief funds; but, so far from this being the case, as was stated a few days ago by the Earl of CRAWFORD and BALCARRES, on the occasion of the fourth annual conference of the Central Association for dealing with distress caused by mining accidents, and of which he was the Chairman, the good feeling between employers and employed was never on a more satisfactory footing than it is at the present time. When it is considered that upwards of 1000 lives are annually sacrificed in the raising of coal in the kingdom, the necessity for relief funds requires no advocacy, and it is gratifying to find that the advantages of them are fully recognised by the men, as shown by the large numbers who are connected with them, and the rapid increase which is constantly going on, so that, at the present time there are two-thirds, at least, of the coal miners who subscribe to them weekly. These payments, as a rule, are supplemented by a percentage on the part of the employers, by which means a large yearly income is ensured. But it has been considered that there is a third party that might well be called upon to contribute to these funds, and so increase their value to those who are benefited, or may be, by them. These are the lessors of royalty owners, who derive large revenues without running any risk whatever, and in this respect differ very much from the lessees. The Durham Association has 1300 aged persons on its books, who receive 3s. a week each, and at the annual meeting, held last week, a levy of an extra halfpenny per week was made, so as to increase the amount to 4s.; and at the same time it was also agreed that an appeal should be made to the royalty owners for annual subscriptions to the fund. Should this be carried out, as no doubt it will, we believe it will be most liberally responded to, and thus an example will be set to the mineral lessees in all parts of the kingdom, and one which they will not be slow in following, and that most liberally. These gentlemen who merely receive the rents or royalties run no risks as regards accidents, have no capital to put down, but they receive certain sums which have to be earned by the

miners, who in doing so are often seriously injured, whilst upwards of 1000 of them are annually killed whilst so employed. Under such circumstances the lessors, we feel sure, would willingly give a trifling percentage of the money thus obtained, and which is only raised by means of a heavy list of killed and wounded. If only one farthing per ton was returned on all coal paid rent for and raised in the United Kingdom there would be an annual revenue from the royalty owners of no less than 156,000*l.*, and this would give 5*s.* a week to 12,000 persons, so that, with the added contributions of the masters and the working miners, an ample provision would be made for every man, woman, and child connected with the great coal mining industry of Great Britain, under any and every contingency. And we do not think it would be asking too much for the lessors of coal mines, whose revenues are obtained at such a yearly loss of lives, that they should subscribe in something like the proportion we have pointed out. We shall therefore look forward, most certainly with a good deal of interest, to the appeal about to be made to the mineral owners of Durham and Northumberland in aid of the Miners' Permanent Relief Fund, having every confidence that such appeal will be most liberally responded to, and so show a worthy example to all other mining districts.

Another and most important subject was brought forward at the meeting at Durham, and which should not be overlooked—that was the disposal of the surplus funds raised from the public on the occasion of great colliery disasters. It was stated that there will be a surplus of 28,000*l.* from the Hartley Fund, after making every provision on a liberal scale for the liabilities. A few years ago some thousands of pounds not required by the committee was sent into other districts, and it is said a similar distribution is about to be made. Several of the delegates at the meeting at Durham considered that the greater part of the surplus should be given to their association, seeing that the money was subscribed principally in the counties of Durham and Northumberland. But the secretary promptly pointed out that this was not the case, seeing that subscriptions were sent from all parts of the kingdom, the Continent, America, and even India. He also stated that it had been decided by those who had the management of the fund to distribute the surplus amongst the districts to which the first portion was sent, and these include the West Riding and Lancashire. But in connection with surpluses there is a sum of from 15,000*l.* to 20,000*l.* that will be left after all the liabilities on the Oaks fund are met; and there is no reason why this money should not be handed over to those associations—or an association—whose province it is to provide for the miner and his family in the event of sickness or death. The Barnsley committee, who have the custody of the money, we certainly think should be called upon to state what they propose doing with the large surplus which they have in hand, and they might be induced to follow the example of the Hartley committee, and they could not do better, perhaps, than give it to the West Riding Permanent Fund, which has done a good deal of good during the few years it has been established.

THE DEVELOPMENT OF IRELAND.

Some three or four weeks ago we directed public attention to the importance of the development of Ireland by means of opening up and working its vast and valuable mineral resources and extending its railways. We proved from facts and figures which we quoted, not only that there is a profitable field for the legitimate outlay of capital, but contended that the permanent employment which would be afforded by the working of the mines and the construction of railways would be the means of conducting far more to the peace and stability of the people than all the mere political nostrums which the present Liberal or any other Government could launch. The postulate is a safe one which asserts that an idle population is a dangerous population, and that an industrious people is a peaceful people. Unfortunately those who know Ireland best are bound to admit that its lower strata are not the most industrious. For this they are to be quite as much pitied as blamed. The rich agricultural lands which once supported comparatively few wealthy landlords have been by degrees cut up into small tenements, and with its miserable hut made to support large families. This wretched system of so-called farming has gone on for generations, and has now taken such a firm hold of the people that penury and idleness are everywhere observable. As a natural result crime in its various phases reigns in many parts of the country. The wealthy landowners have for the most part entirely neglected their best interests and ignored their duties. Whilst giving due attention to the cultivation of the soil, they would (if they had been wise in their day and generation) have seen that they would be promoting their own material interests and the prosperity of the whole kingdom by supplementing the agricultural interest by the opening up and working of the far more precious mineral deposits which everywhere lie in their midst. And once it became evident that Ireland has really determined to help herself—to work out her own redemption—English capital and English enterprise would have come to the front, and national prosperity would have been the result.

It is satisfactory to find that our remarks have not been altogether disregarded, but have been endorsed by those who are most conversant with the various aspects of the question. We are more than ever convinced that the regeneration of Ireland, as a nation, depends upon finding permanent and remunerative employment for its people. Everything short of this touches only the mere fringe of the subject. The ulcer of idleness and indifference is rapidly eating out the energies and vitals of the nation. This ulcer must be removed, and by no more efficacious way, can it be accomplished, than by providing work, and, as a sequence, comfort and prosperity for its teeming thousands. Emigration has been suggested as the panacea for all "the ills the Irish flesh is heir to;" but this, good as far as it goes, will but modify the evils, not remove them. And why should the bone and muscle and strength of the people be driven from their fatherland if profitable work could be found at their own threshold? That the opening up and working of its various mineral deposits, the extension of its railways, the multiplication of its manufactures, and the erection of works of public utility, would afford much remunerative employment for the people no one can question. Thousands of acres of the richest mineral deposits lie dormant for want of British enterprise and British capital, and it is a sad reflection upon our wealthy capitalists that, whilst they speculate their tens of thousands upon questionable schemes and projects in foreign lands, they neglect much more legitimate and profitable fields of enterprise in the Sister Isle. Government, too, would find that any amount of capital expended in the promotion and construction of works of public utility would not only be a safer investment, but would encourage private capitalists to follow in the same direction. It would thus be a powerful lever for good-developing the minerals of the country and extending the railways—the essentials of national prosperity, because providing employment for all classes.

We firmly believe that the dawn of a brighter day for Ireland is at hand. The Government are honestly endeavouring to grapple with the difficulties of pacifying Ireland; and although we firmly believe that the providing of permanent and remunerative work for the masses of the people lies at the very root of the matter, still the measures which have recently received Parliamentary sanction will produce good results. English capitalists are also gradually turning their attention to the development of Irish mines, and the making of Irish lines of railway, and the manufacturing industries generally are reviving. As a proof that the material interests of Ireland are still engaging the earnest attention of the Government, it is satisfactory to find that on Monday last the Select Committee of the House of Commons on Railway Rates and Fares came to the unanimous decision to recommend that with a view to greater economy and efficiency of working, that the whole of the Irish railways should be amalgamated and placed under a board of 18 directors, with one secretary and one general manager. They also resolved unanimously to recommend that the classification of goods should be made uniform over the three kingdoms, it having been found that the classification is at present less liberal on Irish than on English railways, especially as to agricultural produce and implements, and that the local rates are high out of all proportion as compared with through traffic between stations in England and

stations in Ireland, to the great injury of the large wholesale houses. This decision of this Select Committee is unquestionably a move in the right direction, and we see in it a germ of that expansion of railway enterprise which is so essential for the growth and prosperity of the country. Railway communication will lead to the working of minerals which now lie dormant for want of such communication, and when once the attention of English capitalists is directed to this wide, and, as we believe, profitable field of enterprise, renewed life and vitality and prosperity will follow. It is one of the proper functions of the Press to endeavour to enhance the material welfare of the people, and being convinced that the true regeneration of the Irish people as a nation is to be found in providing permanent and remunerative work by means of its mines and railways, we make no apology to our readers for again alluding to so important a question.

THE WORLD'S COAL PRODUCTION.

A very painstaking French statistic, M. PAUL TRASENSTER, has been laboriously compiling a mass of statistics in illustration of the progress of the world's coal production. Whether the figures which M. TRASENSTER has thus brought together are completely reliable, or whether they must be regarded in the light of an approximation only to the actual facts of the case, there can be no doubt that M. TRASENSTER is correct in his final conclusion that the extraction of mineral combustible has immensely increased during the last 20 years. In 1860 the production of coal throughout the world—or, at any rate, in the various countries in which coal is mined to any appreciable extent—amounted to 134,300,000 tons. In 1870 the corresponding extraction had been carried to 212,000,000 tons. In 1880 there had been an advance to 331,100,000 tons. It will be seen that while the increase in the production, comparing 1870 with 1880, was 77,700,000 tons, the corresponding increase in the production, comparing 1880 with 1870, was 119,100,000 tons. But the increase did not stop even here, for, according to M. TRASENSTER, the production was carried in 1881 to 351,000,000 tons. It should be remarked that the data of M. TRASENSTER are confined to Great Britain, the United States, Germany, France, Belgium, and the Austro-Hungarian Empire, M. TRASENSTER apparently not considering the other minor coal producing countries of the world as scarcely worthy attention. At the same time we cannot lose sight of the fact that coal is also raised in Nova Scotia, in New Zealand, in Borneo, in British India, in Spain, in Russia, in New South Wales, and at several other points; and speaking roughly we should imagine that the combined annual extraction of these various countries cannot be less than from 5,000,000 to 10,000,000 tons, so that we may accordingly estimate the aggregate production of coal throughout the world last year at about 360,000,000 tons. To return to the extraction of Great Britain, the United States, France, Belgium, and the Austro-Hungarian Empire, it may be interesting to contrast more closely the production of 1880 with that of 1860. According to M. TRASENSTER the increase in the production of Great Britain during the 20 years was 63,900,000 tons. The increase in the production of the United States in the same period was 55,100,000 tons; and the increase in the production of Germany was 46,900,000 tons. France increased her coal production during the 20 years to the extent of 11,100,000 tons, and Belgium raised 7,000,000 tons more coal in 1880 than in 1860. The growth of the coal extraction of the Austro-Hungarian Empire during the 20 years would appear to have been 12,500,000 tons. It will be seen that coal mining made more progress during the 20 years in Great Britain than in any other country, although the United States certainly pressed this country rather hard, while last year the coal extraction of the Great Republic is considered to have further expanded to the extent of no less than 10,000,000 tons. Great Britain has still a long lead in the matter of her coal production; and, however, great may be the efforts of the United States to develop their great mineral wealth some years will clearly elapse before they attain the first rank among nations in respect of their coal extraction. The increase in the production of coal in Germany has also been very considerable, and would seem to indicate that Germany is likely to become a much more important industrial country than she has hitherto been. France advances in her coal production but in a very *festina lente* fashion, the French, as a people, not being very fond of mining pursuits. Belgium has certainly increased her coal production to some extent during the last 20 years; but the area of this industrious little country being after all extremely limited the extraction of Belgian coal cannot be expected to advance with the same rapidity as in more important countries, such as France or Germany. The Austro-Hungarian Empire has rather more than kept pace with France in respect of her coal extraction since 1860, and with a further extension of the Austro-Hungarian railway system, and an adherence to a peaceful policy on the part of the Austro-Hungarian Government, it is possible that the production of coal from the soil of Austria and Hungary will continue to still further increase. After all, it is the progress of the demand for coal which is the great cause of the growth of its production.

RICHMOND CONSOLIDATED MINING COMPANY.

The precise position of the dispute between the Richmond and the Albion Companies in Nevada has been but imperfectly understood by most people in this country; but an elucidation of the matter has been published in the Daily Exchange of San Francisco, with a copy of which a correspondent has favoured us. The decision of the Supreme Court of Nevada is adverse to the Richmond, but the detailed statement of the case by ex-Senator Stewart can leave no doubt in the mind of any impartial reader that in the Supreme Court of the United States—the Court of Final Appeal—that decision will be reversed, and a decree in favour of the Richmond Company will be the result. The mine in controversy, according to Senator Stewart's explanation, was mineral land of the public domain. The statutes of the United States provide that a locator upon such lands may procure a patent by complying with the local laws and Acts of Congress. The United States statutes also provide that any person having an adverse claim must present the same during the period of publication of the notice of the application for patent, which must be published for a period of 60 days, and that all claims that are not presented during that period are waived. The statute further provides that when a protest is filed, the protestant, to preserve his rights, shall bring suit within 30 days thereafter, to determine the right of possession in a court of competent jurisdiction, and that after the Court has decided which of the two parties—the applicant or the protestant—is entitled to the mine, the Commissioner of the General Land Office shall issue a patent to the successful party in that action. The Richmond Company made an application for a patent to the ground in controversy, Rose and others, the grantors of the Albion Consolidated Company, protested and brought suit. No other claimant did the same, and, therefore, after the time for protesting and bringing suit had expired, all other adverse claims were waived, so that there can be no other title brought into the controversy. The suit of Rose and others against the Richmond Company was tried, and it was finally decided by the Supreme Court of Nevada that Rose and others were entitled to the possession of the premises in controversy, and to receive a patent therefor. The Government of the United States, like any private individual, can only sell its land once; and the decree of the Supreme Court of Nevada is to the effect that the Government must sell the premises in controversy to Rose and others. If that decree is affirmed by the Supreme Court of the United States a patent will issue to the Albion Consolidated Mining Company, and the successor in interest of Rose and others, and that will be the end of the controversy. On the contrary, if that decree is reversed, patents have already issued to the Richmond Company and its title under such patents will be perfect. In other words, the judgment of the Supreme Court of the United States must necessarily determine the whole title to the premises in controversy in the action now pending. Every other possible title or claim to the premises has been waived.

From this statement, than which nothing can be clearer, it is evident that when the Richmond Company applied for a patent, the

application was opposed by the Albion Company (represented by Rose and Co.) but failed; hence the United States patent was granted to the Richmond Company. It has always been represented to British capitalists that the United States patent gives an indefeasible title, and should the United States Supreme Court confirm the Nevada decision this representation would be proved to be false. Senator Stewart correctly affirms that "the Government of the United States, like any private individual, can only sell its land once," and as between the Government and the patentee the sale is only provisional until the United States patent is issued; so the issue of the said patent concludes the transaction, and deprives the United States Government of the property so long as the conditions of the patent are complied with. To suppose that the United States Government would grant, after opposition and trial, a patent to the Richmond Company and subsequently confiscate it and regrant to another would indeed be selling its land more than once, and would, therefore, be against all sound principles of law or justice. It is rumoured that an effort will be made to take advantage of the delay which must necessarily occur before the final appeal can be heard to place the majority of the shares of the Albion amongst British capitalists, but it must be obvious that to buy shares in a mine, the patent for which has been granted, and is still held by other parties, would be hazardous in the highest degree. The present case is of paramount interest to all concerned in American mines, since the decision will determine whether the United States patent does or does not give an indefeasible title to the property to which it relates, and thus enable the parties to decide for themselves whether the American law gives them that amount of protection which capitalists are entitled to expect.

PHENIX ELECTRIC LIGHT AND POWER COMPANY.

A public demonstration of two new lamps about to be acquired by this company was given at Collinge's works, Westminster Bridge-road on Tuesday evening, and was attended by a large number of persons. The current was supplied from a small Gramme machine driven by a semi-portable engine of 6-horse power nominal, running about 145 revolutions per minute with rather more than 40 lbs. pressure of steam. The incandescent lamps, the invention of Mr. Desmond G. Fitzgerald, were first shown and were generally admired. The vacuum globe is larger and more elongated than usual, and the carbon, which is of paper, is of considerably greater length, but the essential feature of the lamp and that upon which its superiority depends is the introduction of a magnesium connecting piece between the conducting wires and the ends of the carbon, the object being to remove the last trace of oxygen within the vacuum tube. Four of these lamps were arranged in the office of the works, and the result was a very brilliant illumination. The experiments being of a purely popular character, no photometrical apparatus was provided, by which the exact candle power of one or more of the lamps could be ascertained; but, judging by the eye, the Fitzgerald lamp is fully equal in illuminating power to any in the market, whilst the great advantage claimed for it is that the adoption of the magnesium connection so greatly augments the durability of the carbon that every lamp is absolutely reliable for considerably over 1000 hours. As Mr. Desmond Fitzgerald is already well known as an electrician confidence may be felt in the practical value of his lamp.

The arc lamp shown the same evening is the invention of Mr. C. G. Gümpel, the anatomical mechanist, and is certainly as neat and simple a piece of mechanism as could be desired. The solenoid by which the upper carbon is lifted to form the arc when the current is turned on is connected with a roller-grip, which grasps the carbon tightly enough to prevent its falling accidentally, and extinguishing the light yet not so tightly as to prevent the feed, or the instantaneous reformation of the arc should a carbon be broken. It is in the feeding arrangement that the novelty and superiority of the lamp consists. In all the more simple form of arc-lamps hitherto introduced gravity alone has been relied upon for bringing the carbons together, hence an instantaneous suspension of the light is inevitable; each time the arc has become too long by the burning away of the carbon the carbons are brought together by the upper one falling, and this latter has to be relighted anew. The interval, although of but a small fraction of a second's duration, is sufficient to spoil the continuity of the light. This Mr. Gümpel avoids by the use of a small shunt, which by a very slight motion keeps the upper carbon constantly to its work, and ensures the arc being practically uniform as long as the lamp is in use. This lamp is likely to be a great acquisition to the company. There was likewise shown a new electric ship-steering apparatus; it will enable the officer in command of the vessel to direct its course from the bridge without the intervention of telegraphs, or signals of any kind. The model on view was carefully and attentively examined by those present.

THE KOHINOOR SILVER MINING COMPANY.

Probably nothing has tended more to prevent the realisation of profit by British capitalists upon their investments in American mines than the enormous expenses and interminable delay arising out of disputes with neighbouring owners or claimants—the result being equally disastrous to the English shareholder, whether the matter is compromised or fought out in litigation; hence it has now become recognised that to secure any hope of profit it is essential that the discoverers or owners of a lode which it is intended to work should obtain control of all the surrounding properties, in order that they may serve as barriers to keep out adverse claimants, just as a barrier of valuable coal has to be left in a colliery to keep back the water in an adjacent flooded pit. The evil of neglecting this precaution is seen in the case of the celebrated Richmond property, although in that instance it has been proved that even the possession of a United States patent is an insufficient protection against adverse claimants and local justice. Fully appreciating these facts, the executive of the Kohinoor Silver Mining Company have been cautious to secure not only a series of highly promising locations, but also such barriers around them as shall render litigation practically impossible.

From the statements made at the meeting of the Kohinoor Silver Mining Company, reported in another column, no doubt can be entertained that several really valuable properties have been acquired, and that although the enterprise has been in existence less than two years, the shareholders have a better prospect of almost immediate returns than many undertakings which have been thrice that time in operation, and which have been making large expenditure. The reason so little has hitherto been heard of the company, although so much progress has been made, was very satisfactorily explained by the Chairman—Mr. John Elliott—who remarked that they had purposely kept their proceedings as quiet as possible, as they were so satisfied from the first that the Donaldson Mine was a great success, that they saw the importance of beginning negotiations at once to acquire all the locations in the neighbourhood which had any likelihood of connection with their property. With this view they have purchased, and partly paid for, the Golden Link, 1000 ft. long, and the Wheatland, 1500 ft. long—the former being a continuation of the Donaldson, and the latter equally necessary to the company. It appears that the Donaldson lode averages 3 ft. wide, and that all the development works have been in ore, the result being that the mine has been proved at a very small expenditure, and that with only 18 miners, they had 2000 tons of ore laid open in April, whilst it is anticipated that by September they can take out 500 tons of ore per month, and make handsome profits. At present they have to send the ore to mills three or four miles distant, but there is a probability of their being able to purchase the Idaho Mills for less than 5000*l.*, and this will effect a saving of several dollars per ton.

The meeting throughout was of a very enthusiastic character, and the lucid descriptions of the properties and their advantages given by the Chairman and by the managing director—Mr. F. A. Sands—were listened to with much interest and attention, the general opinion of the meeting apparently being that very valuable properties have been secured, and that great skill and judgment has been displayed in conducting the negotiations which has resulted in so short a time in their acquisition; indeed, if the energy which has

characterised the proceedings of the board hitherto be continued it is not doubted that the shareholders will be well satisfied.

THE LA PLATA MINING AND SMELTING COMPANY. TO THE SHAREHOLDERS.

From the numerous enquiries addressed to me, it appears that many proprietors, and particularly those who have only recently acquired their shares, are not thoroughly conversant with the position of this undertaking, and in order to answer them as fully as possible, I have thought it best to do so through the medium of this circular. I am the more pleased to avail myself of this opportunity, as it enables me to inform the shareholders that only a few days since I have received a letter from an influential English gentleman, who is now travelling in the United States, and who reports most favourably on the La Plata property. I quote from his letter below.

1.—The first point upon which information seems to be required is as to the liability of the shares, and this is apparently due to the fact that the word "limited" does not form part of the title of the company. The La Plata Company is registered in the same way as all other American joint-stock undertakings, not one of which has the word "limited" included in its title. The liability, however, is strictly limited, the company being incorporated under the laws of the State of New York, and the capital is "unassessable under the laws of this State, and is to be taken to be full-paid stock without any liability to the holder thereof, further than that imposed by our laws with respect to the wages of labourers on the works." Exactly the same provisions exist in all American railways, where also the word "limited" is entirely unnecessary.

2.—Owing to the great depression which recently characterised the stock markets, the shares of the La Plata Company receded from 2½ to 1½. There was no other cause whatever for this fall but sympathy with the surrounding flatness; but some uneasiness was occasioned, and although many proprietors have expressed misgivings upon the subject, I am in a position to state that at no previous time in the history of the company was its business of a sounder and more profitable character than at present. This is abundantly demonstrated by the weekly smelting statements which are regularly published. Thus it is very anomalous to compare the present time with a few months since:—

In November last when the weekly returns averaged from 50000l. to 60000l., and when monthly dividends at the rate of 9 per cent. per annum were being paid, the shares were quoted 2½ to 2½.

Now, when the weekly returns have largely increased (the last four weeks being 72911, 77081, 83171, and 87491 respectively), and that monthly dividends for six months past have been paid at the rate of 12 per cent. per annum, the shares are still quoted at only about 2½.

3.—The company is not a mining enterprise pure and simple as some seem to imagine, but is principally a great smelting business (one of the largest and most important) in the centre of the richest silver and lead producing districts in America. It also owns three very rich mines, but owing to the large supply of ores for smelting from surrounding properties, the company is enabled to keep all its furnaces fully occupied without much encroachment upon its own mining resources.

4.—The company has been established for nearly three years. It is presided over by a board of directors in New York, every member of which is of the highest commercial standing. Since its incorporation no less than 114,589l. 6s. 8d. has been paid in dividends.

5.—The dividends have hitherto been paid monthly, but it has recently been determined to make the distributions quarterly. So far from this change having been suggested from within the company, as some seem to suppose, it has been decided upon by the board in deference to the wishes expressed by the shareholders themselves, many of whom urged the directors to ascertain the views of the whole body of proprietors upon the subject, with the result that an overwhelming majority voted in favour of quarterly rather than monthly dividends.

6.—The property has been very favourably reported upon by Mr. Thos. Rickard, M.E., a member of the firm of Rickard Brothers, of London, and owing to the largely increased number of English proprietors on the books of the company, that gentleman was appointed manager in April last. Although the administration has always been most satisfactory in every particular, the association of Mr. Rickard with the enterprise affords additional security to investors in this country. Copies of his official report can be obtained on application to the company's representative in London, Mr. F. Andrews, of 21, Great Winchester-street, E.C. In a separate report addressed to himself, dated Jan. 9 last, in answer to certain enquiries I made on specific points, Mr. Rickard summed up his favourable statement by adding—"The La Plata bids fair to take rank with the very best of industrial investments."

7.—In Mr. Rickard's official report he suggested certain "possible improvements" in the method of treating the ores and other matters of detail connected with the management. It would seem from the largely increased value of the weekly product for some time past that he has already established certain beneficial changes, for, as previously stated, the recent returns have been from 72911 to 87491, while previously anything over 60000l. had been regarded as exceptionally good.

8.—An important advantage secured by the change in the time of paying the dividends is the increased popularity with which the shares are now regarded by the dealers in the Stock Exchange. Formerly, when paid monthly, the frequency of the distribution involved much confusion in the transactions, and necessitated constant claims for dividends. This will be obviated in future.

9.—A telegram received in London on the 13th instant states that—

"The net earnings for the month of June are good, and exceed £20,000."

10. Anomalous as it may be, there is no doubt that the most disparaging feature with respect to these shares as an investment is, that they appear to return too high a rate of dividend. Gradually, however, as the investing public understand the intrinsic merits of the security, they will overcome this fancied objection, and be rather attracted than discouraged by the fact that they can be bought to yield 12 per cent. per annum. The number of shareholders has been steadily increasing for some months past, and it needs but little further good investment buying to raise the value of the shares to what I consider they are fairly worth as a high-class good dividend-paying industrial enterprise—from 2½ to 3½ per share. Presuming that no increase of dividend beyond 12 per cent. should be earned (though I think under the improvements inaugurated by Mr. Rickard, it is quite likely that much larger profits will be made), the shares at 3½ would still yield 8 per cent. to an investor.

11. I append extracts from the letter of my friend, to which I referred in my opening paragraph:—

"The deeper and richer lodes are still comparatively intact, and the ores now raised are mainly from these mines, which are owned either by corporations with large capital or by private companies with ample means, and being worked on systematic mining principles, they will, it is estimated, produce an almost unlimited supply of raw material for many years yet to come."

"Since the destruction by fire of Grant's Smelting Works at Leadville, the La Plata are the first and most extensive in the district, and they are capable of 'treating' about 170 tons per day, nearly five-sixths of which are ores brought from other mines, which have no furnaces of their own, and the ores are smelted at your works upon terms which yield almost as good a net result per ton to the company as smelting their own ores."

"The 'get' of ore from the company's mines is now only 30 tons per day: that quantity could be easily doubled; but so long as ores can be had from other mines which yield as much net profit per ton as the ores from your own mines, it would be absurd to be working and using your own ores except when absolutely needed to prevent your furnaces being idle through deficiency of foreign supply."

"I understand two furnaces with all the appliances could be added to your existing plant for \$25,000, equal to about 50000l. sterling. This seems a low estimate, but no further engine-power would be needed, and no additional buildings or chimneys required. Each furnace could smelt 25 tons per day, which, upon the assumption of a profit of only 85 per ton, would bring in about £220 per day, or 17,600l. (sterling) a year, and this would increase the dividend from 12 per cent. to 16 per cent. per annum."

"As, however, the general cost of management would not be perceptibly in-

creased, the profit per ton on the extra output should be at least \$10, which would again give another 3 per cent. of dividend."

"This, however, is by no means all that might be saved and added to dividend."

In conclusion I venture to express my firm conviction that, from all the information I possess, and from the opinion of the best authorities and specialists who have visited and reported on the property, the La Plata Mining and Smelting Company is a thoroughly honest and bona fide concern, and its shares a thoroughly sound and improving investment.

WILLIAM ABBOTT.
16, Tokenhouse-yard, London, E.C., July 21, 1882.

MR. RALPH MOORE, G.M.I., ON MINING IN AMERICA

The monthly meeting of the Mining Institute of Scotland was held on Thursday in Hamilton.—Mr. RALPH MOORE, the President, who has just returned from a two months' tour in America, favoured the Institute with a brief account of his impressions of American mining. He travelled about 7000 miles in the country—from New York to San Francisco—and came quietly back, seeing the mining in Nevada, and also a good deal of it in the anthracite region of Pennsylvania. There could be no doubt of the immense resources of the country in minerals—not only in gold and silver, but in coal and iron—and he had no doubt in 40 or 50 years its mineral production would exceed anything in England. He was down three of the gold mines in Nevada, one of which was 2700 ft. deep, and the others 2500 ft. and upwards. The machinery was of a first-class character, and well as some of their engines in the Hamilton district were kept, he should say those in America were still better kept. The pumping machinery was something wonderful—in one case they were pumping 15-in. sets for 2500 ft.; in another case 1600 gallons a minute 2500 ft. Below ground the heat in the lode was about 100°, and in the exploring drifts frequently 130° and 140°, while the water issuing from the fissures came out at a temperature of 160°, something intolerable, and an enormous quantity of ice water was used for drinking and cooling down the men, and was provided by the owners. On the surface they had a very good arrangement of baths where the men shifted, washed, and cooled off previous to going home; they worked in eight-hour shifts, and a very fine set of men they were, mostly young fellows, as the whole region had been opened up since 1860. An immense quantity of alluvial washing is still going on, and the American Consul told him that as much as three millions a year was derived from this source. Coming across home he called at Denver, a place of 60,000 inhabitants, which had been raised within 10 or 15 years, and then went into the anthracite region of the Shenandoah Valley, where some of the seams of coal were 60 fms. thick. The mammoth seam was the principal, and varied from 30 to 40 ft. thick. He went into some of the mines, and was very much struck with the whole arrangement, only he was afraid they were not very particular as to the quantity of coal they got out, and one did wonder that in such a good seam so much coal was being lost. The condition of the men was very comfortable, their houses were of a good kind, their children well clad, and themselves exceedingly happy. He was very proud to see it; he saw some Scotchmen, not very many, a good many Germans and Welshmen, a good many Irishmen, but not so many as he would have thought. The work being rather dangerous necessitated a better class of workmen. He was pleased to find that the State Inspector of Mines was a man from this district, Mr. Manchlin, who went out a working miner, and he got very much attention from him. He also met an oversman from Wishaw and several managers, but, as he had said, not nearly so many as he would have thought. One thing that particularly struck him was while in a mining town of 13,000 inhabitants, and walking through the streets on a Saturday night, he saw a great number of miners well clad, but he did not see a single drunken man. (Applause.) He thought that was highly creditable to them.

SOUTH WALES INSTITUTE OF ENGINEERS.

The quarterly meeting of members was held at the Royal Hotel, Cardiff, on Thursday, Mr. E. Williams, the President of the Institute, in the chair. There were also present Mr. James Murphy Newport; Mr. James Macmurtrie, Badstock; Mr. Marcus Giffiths, Swansea; Mr. W. P. Stewart, Blackwood; Mr. Thomas Griffiths, Cymmer; Mr. T. Hurry Riches, Cardiff; Mr. J. Waddle, Llanelly; Mr. A. B. Bassett, Cardiff; Mr. Charles Thompson, Cardiff; Mr. A. Slater, Gloucester; Mr. Henry K. Jordan, Newport; Mr. T. H. Deakin, Pontypool; Mr. T. G. Davies, Treorkey; Mr. Charles F. Gooch, Cardiff; Mr. H. Huxham, Secretary to the Institute, Swansea, &c. The following gentlemen were elected—As Members: Mr. Charles Liddell Waugh, mining engineer, the Burroughs, Cocker-mouth; Mr. George William Wilkinson, mining engineer, Risca House, Risca, Monmouthshire; Mr. Evan Thomas, safety-lamp manufacturer, Aberdare. As Associates: Mr. Edward John Howard, mine owner, 34, West Bute-street, Cardiff; Mr. Robert William Tolfree, iron and steel works, Tredegar, Monmouthshire. As Graduate: Mr. Robert William Tolfree, mining surveyor, Tredegar, Monmouthshire.

Mr. Hedley, whose paper on a breathing apparatus, to enable persons to pass safely through foul gas in a coal mine, was read at the last meeting, gave some explanations referring to some experiments where the apparatus has been tried at a recent explosion of coal gas, and which were in every respect satisfactory.

A very able paper, on the "Economy of the Blast Furnace," was read by Mr. L. L. Bell, F.R.S., the eminent ironmaster, of Middlesborough, who went minutely into the theory and practice of the manufacture of pig-iron and the consumption of fuel in blast furnaces. The paper was full of figures and formulae, which will be a valuable addition to the published proceedings of the Institute. The cordial thanks of the members were passed by acclamation to Mr. Bell.

A valuable paper was also read by Mr. Sydney F. Walker, M.I.T.E., on the "Principle of Electric Lighting and the Transmission of Power by Electricity," directing attention to the different systems of electric lighting which have been brought before the public, and the special adaptability of electricity to mining operations.

These papers were briefly discussed, and then adjourned to the next meeting for further consideration.

THE GREAT LIMESTONE SLIP IN DERBYSHIRE.

One of the greatest landslips recorded took place lately at Crich, in Derbyshire, by which some hundreds of thousands of tons of fine limestone have been thrown down bodily, happily without doing any personal injury, and although one moderate-sized mansion was overwhelmed, the occurrence will be the means of putting some thousands of pounds into the pockets of the Clay Cross Coal and Iron Company, who for years have been engaged in blasting the stone for the use of the iron furnaces. The work of the quarrymen and the use of explosives have been suddenly done away, so that all now to be done is to break up the stone and send it away, and thus years of labour have been saved. The hill itself which has been removed is one of the most remarkable for its geological formation. It consists of strata of limestone which by volcanic action have been forced up into a dome through overlying strata of an earlier period which were originally deposited horizontally on the limestone, and at one point a shaft was sunk in search of lead ore. It was noticed last year that the quarrying had caused a considerable crack in the cliff extending to a distance of between 100 and 200 yards from the north to the south-west, and the fissure becoming larger it was puddled, but the rains in all probability caused the fissure to reopen and extend, so that in some places it was a yard or two wide. The day before the occurrence took place there were strong indications of what was about to come, so that the few residents were able to make their escape in time. There was a villa in proximity to the cliff, and whilst some men were engaged in taking an inventory of the furniture there was a trembling motion which led to an evacuation of the premises. Then the house began to slide towards the road and then was crumpled up like so much paper, and then some cottages rather farther off gave way, and then came the mighty rush, the cliff moving like a thing of life, the effect being to raise the road up in the first instance and then sweep it away. The cliff, one writer long since stated, was not equalled in England for the lesson it teaches with

respect to some of the ancient eruptions of volcanic agency. When the shaft was being sunk in the expectation of meeting with lead a bed of lava was found in the middle of the cliff, thus showing that volcanic agency was the cause of the upheaval which raised the cliff nearly 1000 feet above the sea level. It may be said that George Stephenson, the eminent engineer, who was the first to open out the minerals at Clay Cross, and the founder of the company, was the first to attack the cliff many years ago for the limestone, and since then it has been continuously worked for the iron furnaces. Now however, not only will the company have supplies without being quarried, but they will be able to supply others. The great landslip, which had it been of any other material would have been a most disastrous occurrence, will be quite the reverse, for the "slip" has done more in the course of a few minutes than quarrying for years could have effected, and that at a comparatively trifling cost.

THE GOLD FIELDS OF GUAYANA.

The Callao Gold Mine, which was opened and worked by a Venezuelan Company, has recently been sold to a group of Paris bankers, headed by Mons. Cazalet, for the sum of 1,000,000l. sterling. The gold produced at the mine during the year 1881 amounted to 71,753 ozs., or almost exactly to two English tons. During that year, however, the production of gold was considerably restricted, in consequence of the very large amount of dead work that was carried out; the output of gold for the present year has so far been very considerably increased. The Callao Mill at present comprises 60 stamps, but it is intended at an early date to increase the mill to 200 stamps, for which an abundance of ore has been laid open, sufficient to last for many years to come. The original capital of this company was 50,000l., represented by 31½ shares, consequently each share on which 1588l. has been paid will now receive from the sale of the mine about 31,750l.: 9710 workmen were more or less engaged at this mine during last year.

The Chile Mine, which is in the same district as the Callao, is another grand property. It is steadily growing into importance, and will shortly rival the Callao. The noted Chile vein has been opened out in this company's property for nearly a mile and half in length, and the gold-bearing quartz discovered will, doubtless, suffice to last for the full time of the company's lease, of which about 95 years have yet to run. There are at present about 500 men working at this mine.

The Potosi Company, having nearly exhausted their small, but rich, portion of the Chile vein, are opening a new, and what bids fair to prove a valuable mine on their Peru lode, the ore from which yields an assay about 3½ ozs. of gold per ton.

The Panama Mine has been acquired by an influential group of French capitalists, who will, doubtless, be well rewarded for their investment, as this is another property of great value, with very large quantities of gold quartz actually laid open, and a mill of 50 stamps erected ready to be put in operation.

The Nacupal Mine, a property adjoining the Callao, and already proved to be equally rich, has also been acquired by a group of Paris bankers, and there can be no doubt but what this property under able management will return very large dividends to the proprietors. The hill of 60 stamps is erected and ready for the commencement of active operations.

The Callao Bis Company have commenced crushing operations with a 20 stamp mill, and shipped home their first 150 ozs. of gold. As the noted Callao lode passes through the centre of this property there can, it is thought, be little doubt but what the company's operations will be crowned with success at an early date.

El Tigre Mine, which at one time rivalled Callao in the production of gold, but the operations at which during the past few years have been less successful, in consequence of the mine closing in and not having again been properly opened, will undoubtedly, when brought under proper management, again produce very large quantities of the precious metal.

These and many other valuable properties are comprised in the Caratall district. But probably the greatest success which has attended mining operations in any country during the past few years is now being met with in the Cicapra district of Guyana, about 38 miles north-west of the Caratall group of mines. The pioneer mine in this district is the Alianza de Cicapra, the reduction operations at which were commenced early in May last, but in consequence of the machinery being still in an incomplete state, the first trial was limited to 10 tons of ore, which gave 415 ozs. of gold, or 41½ ozs. per ton. The quartz now lying on the bank raised from sinking the shaft at this mine is estimated to contain about 60,000l. worth of gold.

The property is owned by a native company, who have expended about 40,000l. on its development. The shares of the company are at present selling at a price which represents 320,000l. as the present value of the mine, but some of the most experienced engineers in the country who have inspected it estimate its value at more than double this amount. In a short time this will, it is thought, make one of the largest and most productive gold mines in the world. In the neighbourhood of the Alianza de Cicapra there are a number of other valuable mines which are gradually being developed and brought into notice. Rich discoveries of gold are also frequently made at a number of other points in the Guayana gold fields.

A railway which will be of immense importance to these mines is now being surveyed by the concessionaires—the Guayana Company of London—from the port of Saravia on the River Orinoco up to the town of Guacipati, the capital of the gold mining districts. The great drawback to the successful working of the mines hitherto experienced has been the enormous expense of inland carriage and the difficulty of getting an abundant supply of good labour. The freight from the River Orinoco up to the mines—a distance by the mule track of from 160 to 180 miles—having averaged from 50l. to 85l. per ton. On the completion of this railway, the works of which are now being actively taken in hand, the freight will be reduced to less than a quarter of this amount, whilst the wages of miners, which now average from 12s. to 15s. per man per day, will probably be reduced to the same proportion. There is believed to be a great future for the gold mines of Guayana, the extent and richness of which it is impossible at the present to estimate.

THE HAMILTON PALACE SALE.—As a matter of record, the event being over, we may state that the grand total of the sale amounts to 397,562l., which, distributed over the 2213 lots, gives an average all through the sale of about 180l. per lot. This wonderful sale has created a sensation for the past month quite beyond all precedent, and may be considered to be altogether by far the most important as regards money value that has ever been known, to say nothing of the surpassing excellence of many of the works of art. The Stowe sale, of 40 days, gave a total of 75,562l.; the Strawberry-hill sale, of 10 days, only realised about 40,000l.; the Bernal sale 62,911l., so that this Hamilton sale exceeds these by more than five times the amount.

THE SOUTH YORKSHIRE COLLIERIES, AND THE LONDON COAL TRADE.—An adjourned meeting of coalowners was held on Wednesday at the King's Head Hotel, Barnsley, to consider the reply of the Great Northern with respect to an application made to reduce the tonnage rates for coal from Yorkshire to London. Mr. A. Chambers, of the Thorncliffe Collieries, presided. The reply of Mr. Oakley, on behalf of the directors of the Great Northern, was appended to the notice calling the meeting, and stated that they were unable to make any concession. It may be stated that the question of a reduction of the rate, which is 8s. 3d. per ton, including city dues, has been agitated for a great number of years. The position of the district collieries and the supply of coal to the Metropolitan was discussed, and a committee was chosen to consider the necessity of conferring with the directors of the London and North-Western Railway Company with respect to the district traffic, in order, if possible, to obtain some relief from the present disastrous state of affairs.

Mr. Alfred T. Slade, chartered accountant, of Grocer's Hall-court, Poultry, announces that Mr. Crawford W. Slade, chartered accountant, of Cardiff

Newport, Mon., has entered into partnership with him, and that the business will in future be carried on in London, Cardiff, and Newport, Mon., under the firm of Messrs. A. T. Slade and Co.

THE COTEHELE COMPANY (LIMITED).—SHARES in this very promising ARSENICAL PYRITES and COPPER MINE FOR SALE at 12s. 6d. a share. Fully paid shares. Apply to Messrs. T. and J. STARR, Calstock, Tavistock.

NO CLERKS, MANAGERS, FOREMEN, or OTHERS in contact with bodies of workmen, or in any position, enabling them to FORM WATCH and CLOCK CLUBS. Advantageous to Conductors of Club, and still more so to Members. Stationery, Books, Rules, Cards, Circulars, &c., all free of charge. Address, "Watch Warehouse," 58, Cambridge-street, Birmingham.

NEW TERRAS TIN MINING COMPANY (LIMITED). Those who are desirous of INVESTING HEREIN should apply at once to the Associated Mineowners' Corporation, Grampound-road, Cornwall.

FOR SALE.—100 Wheel George Mining Shares, dividend, fully-paid, Limited Liability, at £1 per share. Messrs. PENNINGTON and Co., Stock and Share Brokers, 7, Moor-lane-street, London, E.C.

STOCK EXCHANGE SPECULATION ON THE ONLY SAFE SYSTEM. Our Circular on OPTIONS will be forwarded on application, containing full explanations of the system. Everyone desirous of making money should study it. By the mode adopted the profits are unlimited, and the losses strictly confined to the amount paid for the PUT or CALL. In this case the losses can be limited to the cover or deposit. Having special sources of information, we are enabled to advise clients to advantage. The Telephone and the Exchange Telegraph are laid on to our office. A Printed Register of non-quoted Shares for Sale and Purchase is kept, free of charge, for the convenience of clients. ADDRESS: MASTERMAN SMITH AND CO., STOCKBROKERS, 53, LOMBARD STREET, LONDON, E.C.

SAMUEL JAMES, STOCK BROKER AND MINING SHARE DEALER, 14, ANGEL COURT, LONDON, E.C. Son of Capt. A. T. JAMES, late of South France, and other mines. Member of the Redruth Mining Exchange.

OFFERS FOR SALE, all or part, of the following shares free of commission:—
 40 Arenal. 60 Glenroy. 40 South Devon.
 40 Bedford. 20 Grogwinlon. 50 South France.
 20 Blue Hills. 35 Gunnislake (Olliters). 100 South Penstruthal.
 40 Bratsberg. 200 Herodfoot. 30 Tamar.
 75 Camborne Veau. 20 Killfirth. 100 Tankerville.
 40 Carn Brea. 50 Kit Hill. 20 Tin Hill.
 40 Cook's Kitchen. 30 Langford. 10 West Basset.
 40 Conacovill. 100 Morla Du. 20 West Frances.
 40 Coates. 100 Mounts Bay. 20 West Kitty.
 40 Devon Consols. 200 Mysore Reef. 35 West Devon.
 40 Devon Friendship. 25 New Kitty. 10 West Peever.
 40 D'Eresby Mountain. 50 North Busy. 20 West Polbrean.
 40 Dolcoath. 100 Norway Copper. 5 West Selton.
 40 Drakewalls. 20 Old Shepherds. 5 Wheel Agar.
 40 East Blue Hills. 500 Old Owlcombe. 15 Wheel Basset.
 40 East Buller. 100 Parys Copper. 10 Wheel Grenville.
 40 East Chiverton. 10 Penhalls. 25 Wheel Jane.
 40 East Pool. 50 Phoenix United. 10 Wheel Kitty (St. Agnes).
 40 East Roman Gravel. 4 South Caradon. 50 Wheel Uny.
 40 East Wheel Rose. 25 South Condurrow. 25 Wheel Crebor.
 40 Eberhardt. 100 South Crebor. 150 Wheel Sisters.
 40 Frongoch. 10 South Crofty. 100 Wheel Sisters.
 40 Gawton. 10 South Crofty. 100 Wheel Sisters.

The present is a favourable opportunity to purchase low priced shares, and I strongly recommend their purchase.
 S. JAMES is a buyer or seller of all Home and Foreign Mining shares at close market prices.
 Orders by letter or telegram promptly attended to.
 Speculative accounts not opened on any terms whatever.

MR. W. MARLBOROUGH, STOCK AND SHARE DEALER, 29, BISHOPSGATE STREET, LONDON, E.C. (Established 30 Years)

Can sell the following SHARES at prices annexed:—
 40 Bedford Unit, £1 15s. 40 Indian Consols, 15s.
 40 Bratsberg Cop., £1 7 6 20 Killfirth, 45 15s.
 40 Camborne Gold, 11s. 40 South Devon, £1 13 6.
 40 Carnarvon Cop., 11s. 20 Lovell Tin, off. wtd. 20 South Crebor, 6s. 6d.
 40 Chile Gold, 11s. 50 La Plata, 42s. 100 Tankerville, 5s. 3d.
 40 Devon Friendship, 5s. 25 Mona Consols, 25s. 10 West Kitty, £1 1 3/4.
 40 Devala Moyar, £1 2s. 75 Nouveau Monde, 7s 6 50 West Crebor, 13s.
 40 Eberhardt, 11s. 50 Organo Gold. 50 West Lisburne, 17s 6d.
 40 East Blue Hills, 10s. 3 50 P. of Wales, 7s. 6d. 50 West Devon, 7s.
 40 Kingston Down, 16s. 3 50 Parys Corpora., 8s. 9d. 50 West Caradon, 5s. 3d.
 40 Indian Phoenix, 1 7 6 20 Rhodes Reef, 16s. 3d. 5 Wheel Basset, 45 3/4.
 10 Richmond, 43 1s. 3d.

Shares in Home, Foreign, and Colonial mines, bought and sold at net market prices, free of commission.
 Purchases for forward delivery at special prices on receipt of deposit of 20 per cent.
SPECIAL BUSINESS in Indian gold mines, also in rails, trams, Egypt, Ottoman Banks, Turks, and Lombards, for cash or account on receipt of usual cover.
BANKERS: ALLIANCE BANK (Limited).

MESSRS. ENDEAN AND CO., STOCK AND SHARE DEALERS, 85, GRACECHURCH STREET, LONDON, E.C. ESTABLISHED 1861.
 Bankers: London and Westminster, Lothbury, E.C.

MR. GEORGE BUDGE, STOCK AND SHARE DEALER, 9, GRACECHURCH STREET, LONDON, E.C. (Established 29 years)
ALL BUSINESS TRANSACTED FREE OF ANY CHARGE FOR COMMISSION.

Notice to Investors and Speculators. Mr. BUDGE has DEALINGS in—
 40 Bedford United. 40 Goodereve. 65 Parys Copper.
 100 Chontales. 150 Grogwinlon. 150 Pestarena.
 100 Colorado. 25 Hington Down. 50 South Indian.
 100 Callan Bie. 100 Indian Consolidated. 50 South Devon.
 150 Carn Camborne. 50 Indian Phoenix. 50 South Penstruthal.
 40 Devon Friendship. 100 Javall. 25 South Tolcarne.
 40 Don Pedro. 60 Kit Hill. 20 Tamar.
 40 Dolcoath. 100 Kapanga. 100 Tollima A.
 40 Eberhardt. 20 Lead Hills. 10 West Kitty.
 40 East Blue Hills. 50 Last Chance. 70 West Polbrean.
 40 East Caradon. 35 North Busy. 40 West Godolphin.
 40 Frongoch. 20 New Kitty. 25 West Crebor.
 40 Gawton. 70 Organo. 50 Wheel Coates.
 40 Glenroy. 100 Polbrean. 100 Wheel Jewell.
 100 Gold Coast. 100 Prince of Wales. 20 Wheel Uny.

SPECIAL BUSINESS in Trevaunance, Wheel Agar, West Kitty, Organo, New Kitty, Parys Copper, Frongoch, Dolcoath, Gawton, and Bedford United.

MR. W. TREGELLAS, 40, BISHOPSGATE STREET WITHIN, E.C.
 Deals in all descriptions of STOCKS and SHARES at close market prices.

ORACE J. TAYLOR, STOCK AND SHARE DEALER, 38, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C.
BUYS and SELLS every description of STOCKS and SHARES at the closest market prices of the day, either by telegram or letter. All enquiries promptly replied to.
BANKERS: THE CENTRAL BANK OF LONDON.

JOHN THOMAS, STOCK AND SHARE BROKER, (On commission only.)
 Mines inspected and faithfully reported on. Mining Machinery valued. Estimates given for the erection of Mining Plant. Twenty Years' Experience. Advice given as to Buying or Selling Mine Shares. ADDRESS—REDRUTH, CORNWALL.

MR THOMAS CORNISH, CONSULTING MINING ENGINEER AND FINANCE AGENT.
 Twenty-five Years Practical Experience in Australian Gold Mining and Management. Advice on Gold Mining Investment. Author of "Gold Mining: its Results and its Requirements," 81, FENCHURCH STREET, LONDON, E.C.

MESSRS. J. TAYLOR AND CO., MINING ENGINEERS AND INSPECTORS, 28, LONDON WALL, LONDON, E.C.
 Have Agents in the various Mining Districts of Great Britain, the Continent, Australia, and the United States of America. Inspections undertaken, either personally or by our Agents, and Reports of Advice as to Working given.

MR. JOHN RISLEY, STOCK AND SHARE BROKER, 31, CORNHILL, LONDON, E.C. ESTABLISHED TWENTY YEARS.
BANKERS: LONDON AND WESTMINSTER, Lothbury.

SHAFT SINKING—SOUTH PENSTRUTHAL MINE.
THE COMMITTEE of the ABOVE MINE is desirous of CONTRACTING for the SINKING of the FLAT-ROD SHAFT 30 fathoms below the 130 fm. level. The said shaft to be not less than 11 ft. by 7 ft. within timber (where timber may be required). The Contractor must engage to sink not less than 4 fms. per month, under penalty of cancelling his contract at the Committee's option. Steam or compressed air will be supplied by the Mine, and the rock broken down to surface. All other costs to be borne by the Contractor. For further particulars apply to Capt. DAVEY, at the Mine, near Redruth, Cornwall; or to Mr. EDWARD ASHMEAD, the Secretary, 2, Draper's Gardens, London, E.C.

WANTED, a SECONDHAND SET of RUBBER STAMPS for Plans and Drawings—Surveyors' use. Send fac-similes to A. WETHERELL, 47, Finsbury-circus, E.C.

WANTED, for a Lead Mine in North Wales, a COMPETENT AGENT, about 40 years of age, who thoroughly understands Mine Machinery (Steam), Pitwork, and general underground work, and also Lead Ore Dressing and the general management of a mine. Apply by letter, with testimonials, and stating wages, to Mr. A. ASH, St. Stephen's Chambers, Telegraph-street, London, E.C.

WANTED, a RESPECTABLE YOUNG MAN for a MINING OFFICE in SPAIN. One who has a knowledge of Book-keeping preferred. Address, stating age, salary required, &c., to "Box 196," Post Office, Newcastle-on-Tyne.

CERTIFICATED AGENT AND MANAGER. BIRLEY SILKSTONE COLLIERIES, NEAR SHEFFIELD.

WANTED, a THOROUGHLY EXPERIENCED AGENT and MANAGER. Applications, stating age, particulars of present and previous employment, references, and salary required, to be sent to the Managing Director, THE SHEFFIELD COAL COMPANY (Limited), at the Collieries, forthwith. There are two Silkstone Collieries, with a joint output of between 8000 and 9000 tons per week.

MINING MANAGER is open to an APPOINTMENT on a GOLD MINE. He is competent to design, construct, and erect first-class reducing plant, and to save gold if as fine as flour. Photos of his last works can be shown. He is also prepared to inspect and report on mines in any part of the world, either for syndicates or private individuals. Address, by letter, "Gold," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

EXPERIENCED GOLD MINING ENGINEER, about proceeding to America, is prepared to arrange for INSPECTING and REPORTING ON MINING PROPERTIES, or to transact any confidential business in connection with mining. Unexceptionable references. Address, "Engineer," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

DOWSING. A GENTLEMAN who has reason to think there are MINERALS on his ESTATE desires to obtain a DOWSER to use the Rods on his land. Apply, with references and terms, to "J. M. H." Balham House, Balham Hill, S.W.

A PRACTICAL and EXPERIENCED MINING ENGINEER, having had several years experience in Spain, will become DISENGAGED towards the close of next month, and desires an APPOINTMENT as MINE MANAGER. Good testimonials. Address, "H. B.," Minas de Calceno, Por Mores, Provincia de Zaragoza, Spain.

ARIZONA ORES. A GENTLEMAN, lately returned from the United States, would like to DISPOSE OF a HANDSOME COLLECTION OF ASSAYED TYPE SPECIMENS OF ORES from Southern Arizona and Mexico. Address, STEPHEN RICKARD, Downham Villa, Forest Hill, S.E.

FOR SALE, a SULPHUR MINE of the value of about £4,000,000 sterling, situate in Italy, in the Province of FORLI (Romagna.) For full particulars apply to Mr. NATALE DI GNO, Aducci, Forli. Correspond by preference in the French language. The owner desires to negotiate directly with the intending purchaser. The principal sulphur mines in the Romagna are only five in number, including the above, which is the best. A company with large capital at its disposal could negotiate, whilst purchasing the above, for the others also, and thus secure the monopoly of the sulphur of the Romagna, which is reputed to be the best in all Italy.

FOR SALE, SEVEN HUNDRED £1 SHARES in EAST CRAVEN MOOR MINING COMPANY (17s. paid). Apply, "Alpha," care of Messrs. Jones and Yarell, 8, Bury-street, St. James's.

ONE or TWO GENTLEMEN required to assist in COMPLETION of PURCHASE and OPENING OUT of VERY VALUABLE MINING PROPERTY in CORNWALL. Money required, £2000. Apply, R. S. BROCKELBANK, 15, King-street, Cheapside, E.C.

SOUTH AFRICA (KIMBERLEY) DIAMOND FIELDS. INVESTORS desirous of getting AUTHENTIC and RELIABLE INFORMATION on the DIAMOND FIELDS in the above Region, can procure the same through the Agency of Mr. JOHN HOCKING, Engineer, Trewirgic-road, Redruth.

ONTARIO SILVER MINING COMPANY. DIVIDEND No. 81. THE REGULAR MONTHLY DIVIDEND AT FIFTY CENTS (2s.) PER SHARE has been DECLARED for June, PAYABLE at the Office of the Transfer Agents, WELLS, FARGO, and Co., 65, Broadway, on and after the 15th inst. The above Dividend is payable at our office on all Stock registered in England.

EIVES and ALLEN, Agents, 99, Cannon-street, E.C.

MINE "EL CALLAO." GUAYANA, VENEZUELA. COUPONS OF SHARES 322 Gold in bars produced in the month of May, 1882, and remitted to Messrs. Baring Brothers and Co., London, 6876-46 ozs. DIVIDEND distributed for each coupon, £200. (Signed) A. LICCIONI, President. (Signed) G. BARNEWITZ, Treasurer.

THE PEPPER MILL BRASS FOUNDRY COMPANY of WIGAN. Are EXHIBITORS of COLLIERY SPECIALTIES at the EXHIBITION in the ALEXANDRA PALACE, NORTH LONDON, which OPENED on the 26th inst. No. of Stand, 126, in the East Side of the Building.

SUMMER TOURS IN SCOTLAND. GLASGOW AND THE HIGHLANDS. ROYAL ROUTE VIA CRINAN AND CALEDONIAN CANALS. Royal Mail Steamer COLUMBA or IONA, from GLASGOW daily at Seven A.M., and from GREENOCK at Nine A.M., conveying, in connection with his West Highland Steamers, PASSENGERS for OBAN, FORT WILLIAM, INVERNESS, LOCHABE, SKYE, GAIRLOCH, STAFFA, IONA, GLENCOE, ISLAY, STOKENAY, &c. Official Guide, 3d.; Illustrated, 6d. and 1s. by post; or at W. H. Smith and Son's Railway Bookstalls. Time Bill, with Map and Fares, free from the Owner, DAVID MACBRAYNE, 119, Hope-street, Glasgow.

CALIFORNIAN AND EUROPEAN AGENCY, 309, MONTGOMERY STREET, SAN FRANCISCO, CAL. J. JACKSON, Manager

THE PROPERTY HAS BEEN PERSONALLY EXAMINED BY TWO MEMBERS OF THE COMMITTEE.

THE WEST AFRICAN GOLD FIELDS, GOLD COAST COLONY.

"I have examined the sample of gold dust received May 26th, and find the following to be the result:—
 Apatim Gold—
 From 3 lbs. Clay: 1 oz. 13 dwts. 12 grs. per ton of 20 cwt.

FRED. CLAUDET.
 Assay Office and Laboratory, 6 and 7, Coleman-street, London, E.C., May 26, 1882.

The clay above referred to was picked up at random by Capt. Burton, who says the property contains millions of tons of it.

THE WEST AFRICAN GOLD FIELDS (LIMITED.)

Within a quarter of a mile of the sea coast, 4 square geographical miles of British territory impregnated with gold Incorporated under the provisions of the Companies Acts, 1862 to 1880, limiting the liability of shareholders to the amount of their shares.

Capital £100,000, in 50,000 shares of £2 each, Of which 33,340 are offered for subscription at par, the remaining 16,660 being issued to the vendor in part payment of the property; 5s. per share payable on application, 5s. per share payable on allotment, 10s. per share payable two months after allotment. In cases where no allotment is made, the deposit will be returned in full.

COMMITTEE.
 Captain BAYLEY, Oriental Club, Hanover Square, W.
 Captain RICHARD F. BURTON, F.R.G.S., Montagu Place, Montagu Square, W.
 Commander CAMERON, R.F., C.B., Shoreham, Sevenoaks, Kent.
 GEORGE CLERIHEW, Esq., Director of the Government Stock Investment Company (Limited).
 E. BOYCOTT JENKINS, Esq., 9, St. George's Place, Hyde Park.
 ANDREW STEWART, Esq., Liverpool, Director of the Gold Coast Mining Company (Limited).
 JAMES WISEMAN, Esq., F.R.G.S., Orme Square, Kensington Palace Gardens.
BROKERS.—Messrs. DE VERE, BEAUCLERK, and Co., 2, Copthall Buildings, E.C., and Stock Exchange.
SOLICITORS.—Messrs. HARPER and BATTOCK, 23, Rood Lane, E.C.
BANKERS.—The LONDON and COUNTY BANKING COMPANY, (Limited), 21, Lombard-street, E.C., and Branches.
SECRETARY.—Mr. G. B. WALKER.
OFFICES.—1, ST. MICHAEL'S HOUSE, ST. MICHAEL'S-ALLEY, CORNHILL.

PROSPECTUS.
 This company is formed for the purpose of acquiring a lease, granted in 1881 by Chief Kwabina Sensesse of Apatim, in the district of Axim, British Gold Coast Protectorate, of 144,000,000 square feet, or 3300 acres of land, known as the Gold Mines of Boujah, and all mines, minerals, and substances upon and under the same, for a term of 99 years at a yearly rent of £12, to be increased to £120 from the commencement of the regular working of the mines, with the option of renewal for a further period of 99 years upon the same terms. The lease has been duly registered in the registry of the Supreme Court of the Gold Coast Protectorate. The centre of the property is situated in 4° 55' north latitude, longitude 2° 14' west, 2 1/2 geographical miles north, and by west from the port of Axim, its nearest point being 2200 yards from the Fort, and its north-western limit abutting upon the Ancobra river. It has been recently examined by Mr. R. B. N. Walker, F.R.G.S., by Capt. Richard F. Burton, and by Commander Cameron, R.N., C.B. Extracts from their reports are annexed. Capt. Burton, in January, 1882, went to the Gold Coast with Commander Cameron, and the journey convinced him that we have there another California. Landing on the shore they found native women washing the sand for gold. After rain they found gold spangles showing in the streets and roads; indeed, it is simply a country impregnated with gold. They found two distinct processes; the men sinking pits or shafts to scrape the walls of the reefs, and the women washing the topsoil, or in other words "hydraulic." They consider that if honest work be done on the Coast, there is no place where there can be a better investment for money than in the gold mines of the West Coast of Africa.—Vide Liverpool Daily Courier, May 22, 1882.

The port of Axim is only 23 days' steam from Liverpool, and there is regular communication by steamer every fortnight, and oftener when inducement is given.

The Gold Coast of Africa has been famous for centuries as a gold producing country.

This gold has been hitherto obtained in the most elementary manner, the natives being in absolute ignorance of the commonest mechanical appliances for draining and working their shafts. As soon, therefore, as the mines are "drowned out," which constantly occurs, the natives sink another shaft; and so rich is the whole country that for centuries they have been satisfied with the foregoing methods, leaving the underlying reefs for the intelligence and enterprise of the present day.

It is not alone in the surface washings that the great wealth of this property exists, the whole being highly auriferous with numerous reefs running through it in meridional directions. Vide report.

It is manifest that a property containing as this does 4 square geographical miles would be impracticable to thoroughly work under one organisation; there sufficient extent of ground to engage the attention and employ the financial resources of several combinations. It is, therefore, intended that this company shall organise, when practicable, other companies, amongst whom portions of the land shall be divided, each paying to this company such price in cash and shares as may be arranged between them and the committee. Thus the parent company, in addition to its own mining operations, will, as holders of stock in the various companies to be formed, be interested in the whole mining industry of the concession. Pending such subdivision of the property, the washings alone will, in the opinion of the committee, enable them to pay handsome dividends on the capital to the company.

With this object, it is intended at once to provide and send out the necessary machinery—steam-engine, pump, chemicals, planks, for making sluices, &c., and the committee confidently anticipate that within six months results will be obtained highly satisfactory to the shareholders.

Such portions of the property as may eventually be sold will probably realise sufficient to recoup several times over the entire purchase-money to be paid by this company.

The only contract entered into is dated 19th June, 1882, and made between J. W. Reader of the one part, and G. B. Walker, for and on behalf of the company, of the other part, whereby the company acquires 3300 acres of land, close to the port of Axim, for £22,500 in cash and one-third of the nominal share capital of the company. A copy of this contract, to which is annexed the original lease, together with the Memorandum and Articles of Association, may be seen on application to the solicitors to the company.

No better illustration of the estimate in which the Gold Coast is held by high Government officials can be given than a quotation from the speech of the Governor, Sir Samuel Rowe, made at the meeting of the Royal Geographical Society, held at the London University, on Monday, the 26th June last. He stated—

"That after rain the native police begged to be let off parade, in order that they might pick up the gold dust which lay under their feet."—See Morning Post, June 28, 1882.

J. S. MERRY, ASSAYER AND ANALYTICAL CHEMIST, SWANSEA.
SUPPLIES ASSAY OFFICE REQUIREMENTS AND RE-AGENTS.

BOILER EXPLOSIONS ACT, 1882.

NOTICE TO POLICE AND SANITARY AUTHORITIES, AND TO THE USERS OF STEAM BOILERS.
The Boiler Explosions Act, 1882 (45 and 46 Vict., c. 22), is now in force. Users of Steam Boilers should at once obtain a copy of the Act, in order that they may avoid the penalties attendant on a disregard of its provisions. The clerk of any police, or sanitary, or other local authority, and any user of a steam boiler (other than of a boiler used for domestic purposes) can obtain a copy of the Act gratis by making application by post to the Undersigned within ten days from the date of this notice.

Issued by order of the Board of Trade, this 15th day of July, 1882.

THOMAS GRAY,
One of the Assistant Secretaries to the said Board,
7, Whitehall Gardens, S.W.

ESKDALE, CUMBERLAND.

VALUABLE MINING PROPERTY FOR SALE.

TO BE SOLD, BY PRIVATE TENDER, pursuant to an Order of his Lordship, the Vice-Chancellor BACON, made in the Matter of the Companies Acts, 1862 and 1880, and in the Matter of the WHITEHAVEN IRON MINES (LIMITED), the RIGHT OF MINING for IRON ORE in and under all that tract of hill and valley land lying and being on the north side of Eskdale, in the county of Cumberland, commencing about 4½ miles east of Ravenglass, in the said county, and terminating at the village of Bole, in Eskdale aforesaid, and containing 2000 acres, or thereabouts. Together with all MINES, SHAFTS, LEVELS, and WORKINGS now opened upon, in, and under the said lands, with full liberty rights and powers of working, raising, selling, and removing all the iron ore gotten or to be gotten therefrom. And also Mining and other Plant, Machinery, Tools, Materials, Buildings and Shedding, and Iron Ore lying and being or in and about the said mines or any of them. And also all that piece or parcel of freehold ground and gardens, with the 12 houses standing and being thereon.

The above-named mining property is subject to a royalty of 7d. per ton, and a minimum royalty rental of £150 per annum.
Tenders are to be sent to CHARLES HARWOOD CLARKE, Esq., the Chief Clerk of the Vice-Chancellor Sir James Bacon, at his chambers situated at the Royal Courts of Justice, Strand, London, not later than Tuesday, the 28th day of August, 1882. Particulars and conditions of sale and forms of tender may be obtained gratis of J. H. TILLY, of 37, Queen Victoria-street, London, E.C., and of Messrs. JACKSON AND EVANS, Solicitors, of 81, Gracechurch-street, London, E.C.

JACKSON AND EVANS, 81, Gracechurch-street, London, E.C.
Dated this 17th day of July, 1882.

SECOND-HAND, BUT EQUAL TO NEW:—
STEAM BOILERS.—Three first-class Boilers, 30 ft. by 7 ft., two flues, Galway tubes in, and fittings, four years old, insured at 75 lbs. pressure. Will be sold cheap.

BOILERS.—Two Boilers, 28 ft. by 7 ft., two flues. Been working at 65 lbs. Price on rails, £130 each.
Other sizes of Boilers in stock, in excellent condition, 28 ft. by 7 ft., 24 ft. by 7 ft., 24 ft. by 6 ft., 20 ft. by 5 ft., 15 ft. by 5 ft., and 12 ft. by 5 ft. Safe for 65 and 60 lbs. pressure. Very cheap.

PUMPING ENGINES.—Beam and Horizontal. Diameters of cylinders, 100 in., 90 in., 65 in., 60 in., and 38 in. Very cheap.

WINDING ENGINES AND COLLIERY PLANT of every description, second-hand, in stock.

H. HELLWELL AND CO., 4, NORTH CORRIDOR,

ROYAL EXCHANGE, MANCHESTER.

RAILS for SIDINGS, TRAMWAYS, &c., with all fittings complete. All sections, from 10 to 80 lbs. per yard. Shippers enquiries promptly attended to.

Apply to G. BRADSHAW, 22, Cooper-street, Manchester.

FOR SALE, TWO SECOND-HAND ENGINES, equal to new, 26 in. cylinders, 4 ft. stroke, mounted on strong cast-iron diagonal frames, and fitted with condensers and reversing gear; suitable for Winding, Air-compressing, or Driving Stamps, and will be sold cheap.

Also, a NEW 12 in. HORIZONTAL ENGINE, and ONE 5 in. and ONE 6 in. SECOND-HAND DONKEY ENGINES.

Every description of MINING PLANT always on sale.

Apply to FRANCIS DINGY, Engineer and Ironfounder, Truro Cornwall, where the above may be seen.

THE

ALLEN STEAM ENGINE GOVERNOR develops the utmost Power, gives Uniformity of Speed under varying loads, and Economises Fuel.

ALSO

PEET'S PATENT VALVE TAP, for Steam, Water, and Gas, from ½ inch upwards. Simple, durable, double seats, full way, and all parts interchangeable.

For particulars, apply to—

WHITLEY PARTNERS, RAILWAY WORKS, HUNSLY ROAD, LEEDS.

PUMPS

AT GREATLY REDUCED PRICES:—

NEW, HORIZONTAL.—Two 12 × 8; one 3 × 2; one 3 × 1½; one 7 × 5, with condenser; one new treble barrel, 4 in. rams, for horse power.

DONKEYS.—Two 5½ in. cylinder, 9 in. stroke, 3 in. ram. PULSOMETERS.—One No. 1, and foot valve; one No. 3, and foot valve.

SECONDHAND, HORIZONTAL.—One 12 × 5; one 6 × 5; one 5 × 3; one 6 × 3; one 3 × 1½.

DONKEYS.—One 8 × 10 × 4½. PULSOMETERS.—One No. 1. CENTRIFUGAL.—One 4 in.; one 8 in., by Gwynne; one 8 in., Appold's patent.

HOLMAN'S DOUBLE FORCE, 5 in. cylinder. All in first-class order. Prices and full particulars from the owner.

CHARLES D. PHILLIPS,

MACHINERY REGISTER OFFICES, NEWPORT, MON.

N.B.—SPECIALITE.—Lathes, Drilling Machines, and Engineers' Machine Tools generally.

ENGLISH INVESTMENTS

IN

AMERICAN MINES

J. TROWBRIDGE BAILEY,

MINING ENGINEER AND EXPERT.

Member American Institute Mining Engineers.

Detailed and Accurate Reports furnished upon Gold, Silver, Copper, Coal, Properties, Mill Enterprises, &c., in Colorado, New Mexico, and the Central Mining Districts of the United States. Titles examined, Maps constructed, and Reliable Information of any nature concerning Mining Interests furnished promptly.

A List of English and American References of high character can be obtained from Messrs. MARCUS WARD AND CO., No. 68, Chandos-street, London; or MINING JOURNAL Office.

All communications for Mr. BAILEY should be mailed to—

IDAHO SPRINGS, COLORADO, U.S.A.

NEWFOUNDLAND MINERAL LANDS.

TO CAPITALISTS.

THE UNDERSIGNED would inform CAPITALISTS that they hold over ONE HUNDRED LICENCES for LAND in the various MINERAL SECTIONS of the Island, and are prepared to TREAT FOR A PORTION OF THE SAME, with a view of thoroughly prospecting such licences, and eventually working those upon which COPPER, LEAD, or other Minerals may be found. Each licence comprises three square miles. Apply to—

JOHN STEER,
JAMES BROWNING.

St. John's, Newfoundland, April 17, 1882.

REPORTS ON MINES, &c.

THE UNDERSIGNED, Graduate of the Royal School of Mines (1857) London, of varied experience in the States of America, Mexico, and in Spain, undertakes the reporting upon MINING and METALLURGICAL INDUSTRIES in the interest of investors.

Denver, Colorado, U.S.A. A. M. BELL.

J. A. JONES,

MINING ENGINEER,

GIJON (ASTURIAS), SPAIN

Mines inspected and reported on. Assays and valuations effected. Has on hand offers of Mines of Copper, Calamine, Blende, Phosphat of Lime, Tin, Lead, Iron, Manganese, and Manganiferous Iron Ores.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACTS, 1862 to 1880, and of the CALLINGTON CONSOLS (LIMITED).

By an Order made by His Honor the Vice-Warden of the Stannaries, in the said Matter, dated the 6th day of July instant, on the Petition of FREDERICK JONES, of Albert-terrace, Church-road, Upper Norwood, in the County of Surrey, Merchant, claiming to be a Creditor of the said company, IT WAS ORDERED that the VOLUNTARY WINDING-UP of the SAID COMPANY be continued under the supervision of the Court, and that the Liquidators appointed by the Company to conduct such Voluntary Winding-up be also continued.

F. HEARLE COCK, Truro.
(Agent for Snell, Son, and Greenip, 1, George-street,
Mansion House, London, Petitioner's Solicitors.)

Dated Truro, this 15th day of July, 1882.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Devon.

IN the MATTER of the COMPANIES ACTS, 1862 to 1880, and in the Matter of the WALKHAM UNITED MINES (LIMITED).

Notice is hereby given, that a PETITION for the WINDING-UP of the ABOVE-NAMED COMPANY by the Court, was, on the 19th day of July instant, presented to the Vice-Warden of the Stannaries by JOHN NELL, of No. 42, Poultry, in the City of London, Advertising Agent, trading under the style or firm of "The Universal Advertising Agency," claiming to be a creditor of the said company, and that the said Petition is directed to be heard before the Vice-Warden, at the Law Institution, in Chancery-lane, London, on Monday, the 31st day of July instant, at half-past Two o'clock in the afternoon.

Any contributory or creditor of the company may appear at the hearing and oppose the same, provided he has given at least two clear days' notice to the Petitioner, his solicitor, or his agent, of his intention to do so, such notice to be forthwith forwarded to H. M. PAUL, Esq., Secretary of the Vice-Warden, Truro.

Every contributory or creditor is entitled to a copy of the petition and affidavit verifying the same from the Petitioner, his solicitor, or his agents, within 24 hours after requiring the same, on payment of the regulated charge per folio.

Affidavits intended to be used at the hearing, in opposition to the petition, must be filed at the Registrar's office, Truro, on or before the 28th day of July instant, and notice thereof must, at the same time, be given to the petitioner, his solicitor, or his agents.

HODGE, HOCKIN, AND MARRACK, Truro, Cornwall
(Agent for J. W. Sharpe, 11, Queen Victoria-street, London,
Petitioner's Solicitor.)

Dated Truro, July 20th, 1882.

In the High Court of Justice.—Chancery Division.

IN THE MATTER OF THE MID-CANNOCK COLLIERY COMPANY (LIMITED). IN LIQUIDATION.

MID-CANNOCK COLLIERY,
CANNOCK, STAFFORDSHIRE.

IMPORTANT SALE OF VALUABLE MACHINERY, COLLIERY, AND BRICK WORKS, PLANT AND STOCK, HORSES, AND OTHER EFFECTS.

MESSRS. JOSEPH COOKEY AND SON have received instructions from Mr. Walter N. Fisher, the Liquidator, TO SELL, BY AUCTION, at the Mid-Cannock Colliery, on Monday, Tuesday, and Wednesday, the 31st July, and 1st and 2nd August, 1882, at Eleven o'clock A.M. precisely each day—the WHOLE of the MACHINERY, PLANT, STOCK, &c., including TWO PAIRS of HORIZONTAL HIGH-PRESSURE WINDING ENGINES, with 22 in. cylinders and 5 ft. stroke, and 18 in. cylinders and 3 ft. 4 in. stroke respectively.

Two lofty pitch pine pit frames, with pulleys for round ropes; pitch pine conductors.

FOUR LARGE STEAM BOILERS, BOILER FEED ENGINE, CAST-IRON WATER HEATER, STEEL WIRE WINDING AND HAULING ROPES, three pit cages, water dragon.

A 30 ft. WADDELL VENTILATING FAN, with horizontal ENGINE.

TWO SCHIELE'S 36 in. VENTILATING FANS.

BULL PUMPING ENGINE, with about 80 yards of 7 in. pump trees and pitch pine pump rods; 140 yards of 12 in. pump trees; three cast-iron T-beams.

Horizontal high-pressure STEAM ENGINE, 26 in. cylinder, 4 ft. stroke.

Tangye's "SPECIAL" PUMP; TWO PORTABLE ENGINES; saw bench, mortar mill, brickworks' plant, about 165 tons of wrought-iron tramway rails.

297 colliery tubs (21 in. gauge, large quantity of pit timber, about 1500 yards of railway sidings, a 20 ton truck weighing machine, a 10 ton wagon weighing machine, turntable weighing machine, portable weighing machine, by Avery; sinkers' tools, colliers' tools, office furniture, two capital safes.

TWENTY-ONE PIT HORSES and PONIES, with harness, &c.; two carts, doblin cart, contractors' wagons, and a variety of other effects.

The Machinery and Plant are of the best materials and workmanship.

The Colliery is adjacent to the Cannock Station on the London and North-Western Railway. There is also a wharf on the Birmingham Canal.

For catalogues, apply to Mr. WALTER N. FISHER, Chartered Accountant, 4, Waterloo-street, Birmingham; Messrs. WISE, SON, and COOKE, Solicitors, Ashbourne; Messrs. HAND and CO., Solicitors, Stafford; Messrs. SANDERS, SMITH, and PARRISH, Solicitors, Colmore-row, Birmingham; the Auctioneers, Paradise-street, West Bromwich; and at the place of sale.

In the High Court of Justice.—Chancery Division.

COWPEN AND NORTH SEATON COAL COMPANY,
63-798TH SHARES.

IN RE WILLIAM CUTHBERT, Deceased.—CUTHBERT v. CUTHBERT.

M. R. SIMON JOEL (the person appointed by the Judge) WILL SELL, BY AUCTION, pursuant to an Order of the said Court, made in the said action, at the North of England Sale Rooms, 87 and 89, Pilgrim-street, Newcastle-upon-Tyne, on Tuesday, the 8th day of August next, at Three o'clock in the afternoon precisely, 63-798TH SHARES in the CURRENT GOING COLLIERIES of the partnership known as the

COWPEN AND NORTH SEATON COAL COMPANY.

With the PLANT, MACHINERY, &c., and in Freehold Lands, containing about 98 acres, and in the goodwill, capital stock, and all other the assets and effects of the said partnership, including a considerable interest in the Blyth Dock and Harbour Company.

The Collieries are situated in the Northumberland steam coal district, and consist of valuable royalties, embracing an area of 12,000 acres, and held under lease on favourable terms. They are connected with the North-Eastern Railway, which gives them access to the Northumberland Docks and other shipping places on the Tyne. The company's own railway, two miles in length, and their shipping places at Blyth, give them access to Blyth Harbour.

The coal is a first-class steam coal, and is estimated to last at the present rate of working (which for the last few years has been nearly 700,000 tons per annum), for 80 or 90 years, it being estimated that there are upwards of 50,000,000 tons of coal remaining unwrought in the royalties. The pits are of moderate depth, and there are four drawing shafts, and the collieries are fitted up with the most modern appliances.

The plant and machinery for drawing the coal and working the pits are of the most complete description, and the investment is one well worthy the attention of capitalists.

Further particulars and conditions of sale of the Auctioneer; Messrs. COOKEY, WATKINS, and FENYTON, 8, 25, Lincoln's Inn Fields, London, W.C.; Messrs. FIELD, ROSCOE, and CO., 35, Lincoln's Inn Fields, London, W.C.; and Messrs. CLAYTON and GIBSON, Solicitors, Newcastle-upon-Tyne, at whose offices in Newcastle-upon-Tyne copies of the leases under which the above royalties are held, and of the partnership deed, may be seen.

In the High Court of Justice.—Chancery Division.

MR. JUSTICE CHITTY.

BENNOCH V. BARTLETT.

NOTICE IS HEREBY GIVEN that, pursuant to an Order made in the above-mentioned action, dated the 5th day of October, 1881, the LEASES, MACHINERY, PLANT, TOOLS, AND EFFECTS

OF THE

LLAY HALL COLLIERY, IRONWORKS, & CLAYWORKS,

Together with 9 acres (or thereabouts) of Freehold Land, in the parish of Hope, in the county of Flint, and also the equity of redemption of 3½ acres (or thereabouts) of Freehold Land, known as portion of the Syddall Estate, at Cefny-bedd, in the parish of Hope, in the county of Flint, with the 30 Cottages erected thereon (the last mentioned freehold), together with the Cottages to be sold subject to a mortgage for £2421 2s. 3d., repayment of which can be made over a term of years, is hereby OFFERED FOR SALE, BY PUBLIC TENDER, in One Lot.

Particulars and conditions of sale and Forms of Tender can be obtained on application to Messrs. E. F. BARTLETT and H. B. DUKE, the Liquidators and Receivers of the Llay Hall Coal, Iron, and Fire-brick Company (Limited), No. 7, Queen Victoria-street, London, E.C.; to Messrs. DAVIDSON and MORRIS, Solicitors, Nos. 40 and 42, Queen Victoria-street, London, E.C.; to Messrs. HADON and TURNER, Solicitors, No. 18, Fenchurch-street, London, E.C.

The Works, Machinery, Plant, Freehold Cottages, &c., can be inspected any day between Ten and Four o'clock, on production of an Order, application for which should be made to the Liquidators.

Tenders to be addressed, "The Llay Hall Coal, Iron, and Fire-brick Company (Limited)."

Tenders must be sent to the Liquidators, at their offices aforesaid, on or before Friday, the 4th day of August, 1882.

The Liquidators shall not be bound to accept the highest or any Tender.

DAVIDSON AND MORRIS,
40 and 42, Queen Victoria-street, London, E.C.,
Solicitors for the Plaintiffs.

Dated the 19th day of July, 1882.

FOR SALE, a 30 H.P. PORTABLE STEAM ENGINE; with link-motion reversing gear, has drum and gearing complete for winding and pumping.

A 14 H.P. PORTABLE WINDING AND PUMPING ENGINE.
Also a 5 H.P. PORTABLE HOISTING ENGINE.

Apply to—

BARROWS AND STEWART, ENGINEERS, BANBURY.

THE COTON PARK ESTATE,

NEAR BURTON-UPON-TRENT.

MESSRS. WINTERTON, BEALE, and HOULSTON WILL SELL, BY AUCTION, at the Three Queen's Hotel, Burton-upon-Trent (unless previously disposed of by Private Contract), on Thursday, the 3rd of August next, at Five o'clock in the afternoon, subject to conditions then to be read, the following valuable

FREEHOLD ESTATE, called "COTON PARK FARM."

Situated in the parish of Rosliston and in Linton, in the parish of Church Gresley, in the county of Derby, comprising by recent admeasurement 352 A. 0 R. 13 P., or thereabouts, of ARABLE, MEADOW, and PASTURE LAND (all in a ring fence), together with a commodious RESIDENCE, with suitable Out-offices, double Coach-house, five-stalled Stable, and productive walled Garden.

The Farm Buildings, erected a few years since in a most substantial manner, are replete with every convenience for occupation, including an eight horse power high-pressure Steam-Engine, with Engine-house and Boiler, Shuffling, and Gearing complete.

There is an abundant supply of Water, both hard and soft, for the Yards, Sheds, Engine, and Premises.

The Farm is divided into large and convenient Enclosures. The greater part has been deep drained, and the whole is now in an excellent state of cultivation. The Coton Park Farm (proper) is liable to a modus of 2s. 6d. per annum in lieu of tithes, and to a chief rent of 4s. per annum. About Nineteen Acres of the Land in Linton are tithe free.

The Farm is in the occupation of Mr. William Harrison, at the yearly rental of £590 10s., and possession can be had at Michaelmas next.

The Mines of Coal, Ironstone, Clay, and other minerals within, under, and throughout the Estate, are held on Lease by the Coton Park and Linton Colliery Company (Limited) for a term of 60 years from 29th September, 1871, at the minimum rent of £500 a year, and the payment of certain royalties and wayleave. The purchaser will be entitled to the benefit of the said Lease.

In 1870, Mr. F. C. Gillett, an experienced Engineer, made a careful examination of the Estate and a full report thereon (which can be seen at the Office of the Vendor's Solicitors). The following is an extract from his report:—

The following table gave the number of workable seams of coal, their ascertained thickness, and probable yield per acre, as proved at the trial borehole and the shaft:—

No.	Name of Seam.	Thickness.	Yield per Acre.
1.	Little Coal	4 0	4,000
2.	Main Coal	13 2	12,000
3.	Woodfield Coal	5 1	5,000
4.	Stockings Coal	6 3	6,000
5.	Eureka Coal	2 8	2,500
6.	Anglesey Coal	3 9	3,500
Total...		34 11	33,000

Besides the seams enumerated above, several beds of Coal under 2 ft. in thickness were passed through in the shaft, some of which are of good quality; also valuable beds of Fire-clay, Pot-clay, and there is also an excellent bed of Bricks clay close to the surface, with an abundant supply of sand, suitable for building purposes.

The advantageous situation of this Estate (only about 6 miles distant from the important town of Burton-upon-Trent), and the facilities afforded for direct communication with all parts of the Midland Counties by means of the railway, render it a most valuable investment.

Coton Park is situated within 2 miles of the Gresley Station on the Burton and Leicester Branch of the Midland Railway Company, to which there is a branch line passing through the Estate, and called the Coton Park Branch Railway, thereby giving direct access to the great coal-consuming markets of London, Birmingham, and the Midland District, and elsewhere.

Further information and particulars and plan may be had on application to the Auctioneers, Walton, near Burton-upon-Trent, and Lichfield; to Messrs. VALLANCE and VALLANCE, Solicitors, 20, Essex-street, Strand, London; or to Messrs. JENNINGS, SON, and BURTON, Solicitors, Burton-upon-Trent; and 17, Gracechurch-street, London, E.C.

MOLD, FLINTSHIRE, IN LIQUIDATION.

TO COLLIERY PROPRIETORS AND OTHERS.

IMPORTANT SALE OF THE VALUABLE COLLIERY known as the BAILEY HILL COLLIERY.

With the PLANT and MACHINERY belonging thereto as a going concern.

MESSRS. CHURTON, ELPHICK, AND CO. have been instructed TO SELL, BY AUCTION, at the Black Lion Hotel, Mold, on Wednesday, the 2nd of August, 1882, at One Two o'clock P.M. punctually, in One Lot, and subject to such conditions as will be then produced, the undermentioned valuable Property known as the

BAILEY HILL COLLIERY.

With the whole of the PLANT, MACHINERY, and EFFECTS belonging thereto, in full working order, as a going concern, together with the two Railway Sidings, connecting the same with the Mold and Denbigh Junction Railway.

The Property comprises 14 A. 2 R. 10 P. of valuable Freehold Land, upon which the surface plant is set up; also the Leasehold Interest in the Mines of Coal, Gannel, Shale, and Ironstone in Lands in the townships of Mold, Broncoed, and Gwernafael, in the parish of Mold, extending to 342 A. 3 R. 4 P., including the Minerals under the Freehold, in lease to the Bailey Hill Colliery Company (Limited) for the residue of a term of 21 years, from the 30th June, 1874, granted by the lords of Mold, at a dead rent of £400 per annum, recoverable from Royalties.

The Colliery is most advantageously situated, both for land and railway sales, being close to the town of Mold, and a considerable sum has been expended in proving and opening out the mines.

Mr. Wm. Lee, the manager, will show the Colliery, and he will also produce the working plans.

Particulars, with a schedule of the plant and machinery, and any further information, may be had on application to Messrs. KELLY and KEENE, Solicitors, Mold (at whose office a copy of the lease may be seen); Mr. STARKER, the Liquidator, 3, Jackson Chambers, 21, South Castle-street, Liverpool; or the AUCTIONEER, Chester.

BY ORDER OF THE MORTGAGEES.

MERTHYR TYDFIL, GLAMORGANSHIRE.

MOST VALUABLE FREEHOLD AND LEASEHOLD PROPERTIES,
KNOWN AS THE

PLYMOUTH COLLIERIES AND IRONWORKS,

Situate in the parish of Merthyr Tydfil, about 24 miles from Cardiff and 36 miles from Swansea, comprising an area approaching 2400 acres, with a large extent of superior Smokeless Steam Coal, well known as the Hills, Plymouth, and Merthyr Coal. The Collieries are intersected by the Taff Vale Railway, having excellent sidings and approaches thereto. Thus the works are brought into direct communication with the principal shipping ports of Cardiff, Newport, Swansea, and Birkenhead, and all the railway systems in the kingdom. The Buildings and works generally are very extensive, and the internal and other connecting tramways, which are many miles in extent, are admirably arranged for the economical transit of the coals on to the Great Western Railway. The principal seams of coal, well known as the Yard, Four-foot, Six-foot, Nine-foot, Lower-yard, Seven-foot and Lower Four-foot, are of the best quality, and on the lists of the English, French, Italian, and Spanish Governments, and besides the several qualities are in great demand among the Atlantic and Continental Steamship Companies. This portion of the estate presents, therefore, the most advantageous opportunities for profitable working, and is capable of yielding a large additional output and for many years at comparatively trifling increased cost the whole of the unwrought coal, estimated at 46,000,000 tons. The Plymouth Blast Furn

NOBEL'S DYNAMITE



Manufactured and sold by
NOBEL'S EXPLOSIVES COMPANY, LIMITED
 (FORMERLY THE BRITISH DYNAMITE COMPANY LIMITED),

Head Office: 149, West George Street, Glasgow.

EXPORT AGENTS: J. and G. THORNE, 85, GRACECHURCH STREET, LONDON, E.C.

Factories:—ARDEER WORKS, STEVENSTON, Ayrshire.
 WESTQUARTER WORKS, POLMONT STATION, STIRLINGSHIRE.
 REDDING MOOR WORKS, POLMONT STATION, STIRLINGSHIRE.

THE COTTON POWDER COMPANY (LIMITED)

RECOMMEND TO CONTRACTORS, MINERS, PIT SINKERS, QUARRYMEN, AND OTHERS, THEIR

TONITE, OR COTTON POWDER,

AS BEING THE SAFEST, CHEAPEST, AND STRONGEST OF ALL EXPLOSIVES.

TONITE is the most efficient and economical blasting agent ever invented, and is largely in demand. It does not contain any Nitro-glycerine, and is, therefore, exempt from the dangers of exudation, or of freezing and its attendant process of thawing.

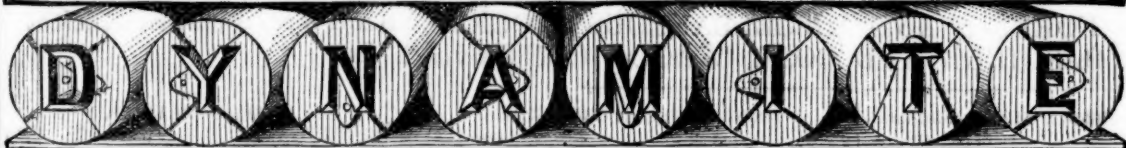
The Company also manufacture PATENT DETONATORS of a quality much superior to the foreign article. The trade supplied on favourable terms.

23, QUEEN ANNE'S GATE, LONDON, S.W.

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Agents: DINEEN and Co., Leeds; DAVID BURNS, Haltwhistle; R. J. CUNNACK, Helston, Cornwall; J. and W. SMITH, Chapel-en-le-Frith; W. VEITCH, Jedburgh, N.B. W. HARRISON, Barrow-in-Furness; W. J. PARRY, Bangor; HUNTER and FOTHERINGHAM, Glasgow.

RHENISH DYNAMITE COMPANY.



OF THE GREATEST STRENGTH ALLOWED BY THE EXPLOSIVES ACT.

Head Office: JOHN DARLINGTON,
 2, Coleman Street Buildings, Moogate Street London, E.C.
 LONDON AGENT,—E. KRAFTMEIER & CO., 5, GREAT WINCHESTER STREET BUILDINGS, LONDON, E.C.

THE TUCKINGMILL FOUNDRY COMPANY,

(TUCKINGMILL FOUNDRY AND ROSEWORTHY HAMMER MILLS),

CAMBORNE, CORNWALL,

Engineers, Iron and Brass Founders, &c.



REGISTERED TRADE MARK. MANUFACTURERS OF EVERY DESCRIPTION OF REGISTERED TRADE MARK.

PUMPING WINDING AND STAMPING ENGINES

ALL KINDS OF

MINING MACHINERY, SHOVELS, AND MINERS' TOOLS;

ALSO OF

BLAKE'S STONE BREAKERS.

ESTIMATES GIVEN UPON INDENTS AND SPECIFICATIONS.

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For Excellence
 and Practical Success
 of Engines.



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 ENGINEERS AND GENERAL MERCHANTS
 HAYLE, CORNWALL

LONDON OFFICE.—186, GRESHAM HOUSE, E.C.

MANUFACTURERS OF
 PUMPING and other LAND ENGINES and MARINE STEAM ENGINES
 of the largest and most approved kinds in use, SUGAR MACHINERY,
 MILLWORK, MINING MACHINERY, and MACHINERY IN GENERAL.

SHIPBUILDERS IN WOOD AND IRON.

HUSBAND'S PATENT PNEUMATIC STAMPS

SECOND-HAND MINING MACHINERY FOR SALE,
 In Good Condition, at Moderate Prices—viz.

PUMPING ENGINES; WINDING ENGINES; STAMPING ENGINES;
 STEAM CAPSTANS; ORE CRUSHERS; BOILERS and PITWORK of
 various sizes and descriptions; and all kinds of MATERIALS required for
 MINING PURPOSES.

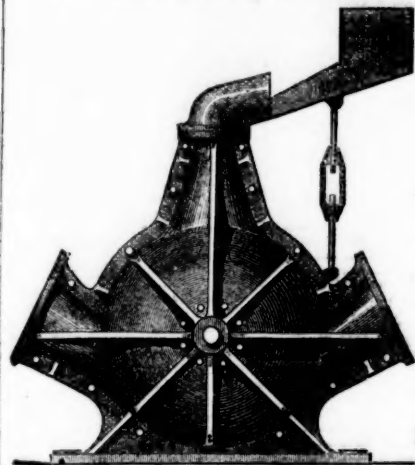
JORDAN'S PATENT PULVERISING MACHINE,

FOR REDUCING

GRAINS, HEMICALS, CEMENTS, CEREALS, &c

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52 GRACECHURCH STREET, LONDON.



SIMPLE.
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REDUCING PLANT.

HAND-POWER

ROCK DRILLS

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MINING PLANT

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THE
 BEST METAL FOR BUSHES,
 BEARINGS,
 SLIDE VALVES,

And other wearing parts of Machinery.

PUMPS, PLUNGERS,
 CYLINDERS, &c.

PHOSPHOR BRONZE

WIRE, TUBES,

SHEET, RODS

TOOLS, &c.

STEAM

FITTINGS.

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MANUFACTURERS

UNDER PATENTS.

THE

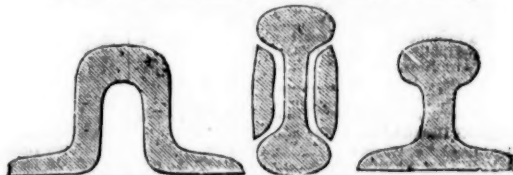
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THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.	Divid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
3200 Blue Hills, t, c, St. Agnes	9 11	12 1/2	1 1/2	52 11	0 10	Nov. 1881
8000 Carn Brea, t, c, Illogan	1 0	5 1/2	1 1/2	118 7	0 0	Dec. 1880
10240 Devon Gr. Consols, t, c, Tavistock	10 14	10 1/2	1 1/2	123 13	0 0	May 1882
4296 Dolcoath, t, c, Camborne	0 9	55	50 50	31 6	1 15	July 1882
4400 East Pool, t, c, Illogan	2 0	0	0	0 0	0 0	Jan. 1881
12500 Froznoch, t, c, Cardigan (11000 sh. iss.)	2 0	0	0	0 0	0 0	Feb. 1882
12000 Great Holway, t, c, Flintshire	4 0	0	0	0 0	0 0	July 1882
15000 Great Laxey, t, c, Isle of Man	0 0	0	0	0 0	0 0	Apr. 1882
6400 Green Hurth, t, c, Durham	2 0	0	0	0 0	0 0	July 1880
20000 Grogwinion, t, c, Cardigan	2 0	0	0	0 0	0 0	July 1880
10240 Gunnislake (Chitlers), t, c	25 0	0	0	0 0	0 0	Sept. 1880
2800 Isle of Man, t, c, Isle of Man	4 0	0	0	0 0	0 0	May 1882
6000 Killfretth, t, c, Chacewater	4 0	0	0	0 0	0 0	Mar. 1878
20000 Leadhills, t, c, Lanarkshire	18 15	0	0	0 0	0 0	June 1882
400 Lisburne, t, c, Cardiganshire	2 0	0	0	0 0	0 0	Aug. 1882
10000 Mellanar, t, c, Hayle	5 0	0	0	0 0	0 0	Feb. 1882
9000 Minera Mining Co., t, c, Wrexham	7 0	0	0	0 0	0 0	Jan. 1880
20000 Mining Co. of Ireland, t, c, t	11 0	0	0	0 0	0 0	July 1880
8000 Mona, t, c, Anglesea	2 10	0	0	0 0	0 0	Nov. 1881
11820 North Hendre, t, c, Wales	13 6	0	0	0 0	0 0	Feb. 1881
2000 Ditto	4 0	0	0	0 0	0 0	Jan. 1881
4760 Penhall, t, c, St. Agnes	4 0	0	0	0 0	0 0	Jan. 1881
6000 Pennant, t, c, North Wales	5 0	0	0	0 0	0 0	Mar. 1878
12000 Phoenix United, t, c, Linkinhorne	6 0	0	0	0 0	0 0	May 1882
18000 Pr. Patrick, t, c, s, (12000 pf. 10 p.c.)	1 0	0	0	0 0	0 0	July 1880
10000 Red Rock, t, c, Cardigan	2 0	0	0	0 0	0 0	Jan. 1878
12000 Rhondda Gravel, t, c, Salop	7 10	0	0	0 0	0 0	May 1882
4000 Rhydallt, t, c, Wales	10 0	0	0	0 0	0 0	Feb. 1880
512 South Cardigan, t, c, St. Agnes	1 0	0	0	0 0	0 0	July 1880
6123 South Cardigan, t, c, Camborne	6 0	0	0	0 0	0 0	Apr. 1882
9000 South Darren, t, c, Cardigan	11 0	0	0	0 0	0 0	Apr. 1880
4500 South Wheel Franch, t, c, Illogan	7 12	0	0	0 0	0 0	July 1880
6000 Tincroft, t, c, Pool, Illogan	11 10	0	0	0 0	0 0	Dec. 1881
15000 Van, t, c, Llanidloes	4 0	0	0	0 0	0 0	June 1882
12000 West Holway, t, c, Flintshire	1 0	0	0	0 0	0 0	Oct. 1889
512 West Tolgus, t, c, Redruth	98 0	0	0	0 0	0 0	Jan. 1871
2400 West Wheel Seton, t, c, Camborne	15 0	0	0	0 0	0 0	Jan. 1878
6000 West Wheel, t, c, Illogan	7 0	0	0	0 0	0 0	Apr. 1882
12000 Wheel Crobar, t, c, Tavistock	2 0	0	0	0 0	0 0	June 1882
10240 Wheel Eliza Consols, t, c, Austell	18 0	0	0	0 0	0 0	Aug. 1880
15000 Wheel George, t, c, Carnarvon	1 0	0	0	0 0	0 0	Feb. 1882
6000 Wheel Grenville, t, c, Camborne	15 0	0	0	0 0	0 0	May 1882
4295 Wheel Kitty, t, c, St. Agnes	5 0	0	0	0 0	0 0	Jan. 1881
2000 Wheel Peavor, t, c, Redruth	7 11	0	0	0 0	0 0	Mar. 1882

FOREIGN DIVIDEND MINES.

Shares.	Divid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
35500 Alamillos, t, Spain	2 0	0	0	0 0	0 0	Mar. 1882
130000 Almaden and Tinto Consol., t, Spain	1 0	0	0	0 0	0 0	May 1876
20000 Australian, t, c, South Australia	7 0	0	0	0 0	0 0	Aug. 1882
15000 Birdseye Creek, t, c, California	7 0	0	0	0 0	0 0	July 1882
20000 Cape Copper Mining, t, c, South Africa	7 0	0	0	0 0	0 0	July 1882
50000 Copiapu, t, c, Chile (24 shares)	3 0	0	0	0 0	0 0	July 1882
70000 English & Australian, t, c, St. Austell	2 10	0	0	0 0	0 0	Mar. 1882
20000 Fortuna, t, c, Spain	1 0	0	0	0 0	0 0	Apr. 1882
25000 Frontino, t, c, Bolivia, New Gran.	2 0	0	0	0 0	0 0	July 1882
15000 Linares, t, c, Spain	3 0	0	0	0 0	0 0	July 1882
60000 New Quebec, t, c, Venezuela	10 0	0	0	0 0	0 0	July 1881
10000 Ditto, Debeers, t, c, South Africa	4 0	0	0	0 0	0 0	Dec. 1880
30000 Oregon, t, c, Oregon, U.S. (pref. sh.)	4 0	0	0	0 0	0 0	Dec. 1880
50000 Pamplico, t, c, Chile	4 0	0	0	0 0	0 0	Dec. 1882
25000 Pitangui, t, c, Brazil (in 6000 £1 pd.)	0 10	0	0	0 0	0 0	Sept. 1880
14000 Pontgibaud, t, c, France	20 0	0	0	0 0	0 0	Dec. 1880
100000 Port Phillip, t, c, Victoria (24 shares)	1 0	0	0	0 0	0 0	Feb. 1881
50000 Rara Fortuna, t, c, Argent. Republic	1 0	0	0	0 0	0 0	July 1882
54000 Richmond Consol., t, Nevada	5 0	0	0	0 0	0 0	Feb. 1882
24520 Rio Tinto, t, c, Mortgage Bds., Huelva	10 0	0	0	0 0	0 0	July 1880
25000 Ditto, shares	10 0	0	0	0 0	0 0	Apr. 1882
40000 Santa Barbara, t, c, Brazil	0 10	0	0	0 0	0 0	Apr. 1882
120000 Scottish-Australian Mining Co., t, c	1 0	0	0	0 0	0 0	Apr. 1882
80000 Ditto, New	0 10	0	0	0 0	0 0	Apr. 1882
22500 Sierra Butte, t, c, California	2 0	0	0	0 0	0 0	Apr. 1882
40625 Ditto, Plumas Eureka	2 0	0	0	0 0	0 0	Apr. 1882
253000 St. John del Rey (45 Stock and multiple deal in)	150 170	0	0	0 0	0 0	June 1882
91896 Tharsis, t, c, Spain (311000 sh. 7 p.c.)	10 0	0	0	0 0	0 0	May 1882
20000 Tollymore, t, c, Colombia (A & B shares)	5 0	0	0	0 0	0 0	Dec. 1881
25000 Victoria (London), t, c, Australia	1 0	0	0	0 0	0 0	Feb. 1881
100000 Victorine (Nevada, U.S.) Deb. Bds.	1 0	0	0	0 0	0 0	June 1882
15000 Western Andes, t, c, Colombia	5 0	0	0	0 0	0 0	Mar. 1882
2100 W. Prussian (55000 pref. sh. £10 pd.)	10 0	0	0	0 0	0 0	Apr. 1881
54800 Yorke Pen., t, c, South Aust. Pref. t.	1 0	0	0	0 0	0 0	May 1882

Have made calls since last dividend was paid.

NON-DIVIDEND BRITISH MINES.

Shares.	Divid.	Last wk.	Clos. pr.
30000 Alston United, t, c, Cumberland	5 0	0	0
12000 Asheton, t, c, Carnarvonshire	0 12	0	0
11583 Bedford Unit, t, c, Tavis (21 sh.)	0 12	0	0
30000 Bodidris, t, c, Denbighshire	1 0	0	0
30000 British, t, c, Wrexham	1 0	0	0
30000 Beuno Consols, t, c, Flintshire	1 0	0	0
20000 Bwlch United, t, c, Cardigan	0 17	0	0
50000 Carn Camborne, t, c, Camborne	1 0	0	0
50000 Carnarvon, t, c, Carnarvonshire	1 0	0	0
37500 Carnarvonshire Cons., t, c, Llanrwst	2 0	0	0
30000 Carpellia Consols, t, c, Stephens	1 0	0	0
6000 Cathedral Cons., t, c, Gwynnapp	0 18	0	0
20000 Central Foxdale, t, c, Isle of Man	1 17	0	0
25000 Coed-y-Fedw & Pant-y-Buarth, t, c	1 0	0	0
24500 Cook's Kitchen, t, c, Illogan	30 14	0	0
10000 Cornwall Great Cons. (4500 issued)	1 0	0	0
4000 Crook Burn, t, c, Cumberland	0 17	0	0
14000 Crosswood Mining Lands, t, c	1 0	0	0
45000 D'Essey Mountain, t, c, Llanrwst	1 0	0	0
20000 Denbighshire Consolidated, t, c	3 0	0	0
12000 Derwent, t, c, Durham	4 0	0	0
50000 Devon, t, c, Tavistock	1 0	0	0
10000 Devon Friendship, t, c, Tavistock	1 0	0	0
12000 Devon Great United (21 shares)	1 5	0	0
50000 Drakevalls, t, c, Calstock	0 15	0	0
10000 Dubby Syke, t, c, Durham	1 0	0	0
12000 East Blue Hills, t, c, St. Agnes	0 5	0	0
6000 East Botolph, t, c, St. Just	0 12	0	0
6144 East Caradon, t, c, St. Cleer	4 11	0	0
4000 East Chiverton, t, c, Penryn	10 12	0	0
30000 E. Craven Moor, t, c, Pateley Bridge	1 0	0	0
15000 East Devon Cons., t, c, Buckfastleigh	2 0	0	0
30000 East Herodsfoot, t, c, Liskeard	1 0	0	0
20000 East Long Rake, t, c, Wales	1 0	0	0
21000 East Roman Gravel, t, c, Salop	0 15	0	0
18000 East Wheel Lovell, t, c, Holston	15 13	0	0
2048 East Wheel Rose, t, c, Newlyn East	1 0	0	0
10000 East Wheel Rose, t, c, Newlyn East	1 18	0	0
12000 Gawton, t, c, Tavistock (21 shares)	1 0	0	0
40000 Glasg. Car. (30000 sh. 1 pd., 10000 15a. pd.)	3 1/2	0	0
14000 Glenroy, t, c, Isle of Man	4 0	0	0
10000 Goddards, t, c, Carnarvon	1 0	0	0
32000 Goginan, t, c, Cardiganshire	1 0	0	0
25000 Gooderever, t, c, St. Cleer	1 0	0	0
20000 Great Merioneth, t, c, Flint	2 10	0	0
20000 Great Dylliff (1000 sh. issued)	2 0	0	0
100000 Great Polgoth United, t, c	1 0	0	0
6000 Great West Chiverton, t, c, St. Agnes	0 5	0	0
10000 Gwyn-y-Mynydd, t, c, Flint (pref.)	4 0	0	0
7000 Gwydyr Amal, t, c, Carnarvon	1 0	0	0
12000 Herodsfoot, t, c, near Liskeard	0 16	0	0
18000 Hington Down, t, c, Calstock	0 12	0	0
20000 Kirk Michael, t, c, (20000 unissued)	1 0	0	0
25000 Kit Hill Gr. Cons., t, c, Llanarmon (21 sh.)	0 15	0	0
15000 Lady Ann, t, c, Llanarmon	1 0	0	0
30000 Lady Ashburton, t, c, Callington	1 0	0	0
15000 Lady Bertha, t, c, Tavistock	1 0	0	0
25000 Langford, t, c, Callington	0 10	0	0
25000 Levant, t, c, St. Just	11 10	0	0
15000 Llandeglan, t, c, Wales	1 0	0	0
5120 Lovell, t, c, Wendron	0 18	0	0
9000 Marke Valley, t, c, Linkinhorne	6 15	0	0
8000 Medlyn Moor, t, c, Wendron	3 15	0	0
20000 New Devon, t, c, (17000 sh. 4d. pd.)	0 8	0	0
20000 Mona Consols, t, c, Anglesea	1 1/2	0	0
15000 Monkstown, t, c, Devon	2 0	0	0
20000 Mostyn Consols, t, c, Flint	1 0	0	0
10000 Mynydd Gwddol, t, c, Cardigan	4 0	0	0
12000 Morla Du, t, c, Anglesea	1 0	0	0
80000 Mounts Bay, t, c, Breage	1 0	0	0
6144 Mount Carbis, t, c, Redruth	1 5	0	0
2400 New Cook's Kitchen, t, c, Illogan	8 18	0	0
8000 New Devon, t, c, Camborne	0 0	0	0
100000 New Great Wheel, t, c, Breage	0 10	0	0
10000 New Holmbush, t, c, Callington	3 0	0	0
6000 New Kitty, t, c, St. Agnes	0 12	0	0
12000 New Penrose, t, c, Helston	1 0	0	0
15000 New Redmoor, t, c, Callington	1 5	0	0
17500 New Terras, t, c, St. Austell	0 5	0	0
3500 New Tincroft, t, c, Lelant	6 0	0	0
12000 New Trumpett, t, c, Wendron	1 0	0	0
12000 New West Cardigan, t, c, Liskeard	0 4	0	0
3000 New Wheel Peavor, t, c, Redruth	0 10	0	0
3000 New Wye Valley, t, c, Montgomery	1 0	0	0
20000 North Alfred, t, c, Phillack	0 10	0	0
5328 North Busy, t, c, Scourier	1 5	0	0
10000 N. D'Essey Mount, t, c, Carnarv.	1 0	0	0
25000 North Goginan, t, c, Cardiganshire	1 0	0	0
6400 North Green Hurth, t, c, (3400 11. pd.)	0 2	0	0

NON-DIVIDEND MINES—continued.

Shares.	Divid.	Last wk.	Clos pr.
25000 North Grogwinion, t, c, Cardighr.	1 0	0	1 1/4
12000 North Herodsfoot, t, c, Liskeard	0 8	0	1 1/4
5000 North Molton, t, c, m, t, Doven	1 0	0	1 1/4
6000 North Penruthral, t, c, Gwennap	2 7	0	1 1/4
2936 North Treaskerby, c, St. Agnes	2 17	10	1 1/4
8000 Northern, t, c, Durham	1 0	0	1 1/4
4000 Okel Tor, t, c, c, Calstock	1 0	0	1 1/4
8000 Old Shepherd, t, c, Cornwall	1 0	0	1 1/4
12000 Pandora, t, c, Carnarvon	2 0	0	1 1/4
11612 Pant-y-Mwyn, t, c, Mold	2 0	0	1 1/4
45000 Parys Corporation, t, c, Anglesea	1 0	0	1 1/4
7500 Pateley Bridge, t, c, Yorkshire	1 0	0	1 1/4
6000 Pedn-an-drea, t, c, Redruth	2 13	0	3 3/4
12000 Pelyn Wood, c, Lanvilly	0 5	8	3 3/4
600 Pendarves United, c, Camborne	0 0	0	—
20000 Penegarg, t, c, Carmarthenshire	1 0	0	—
12000 Pen-y-Oscedd, t, c, Flintshire	1 0	0	1 1/4
15000 Perran Consols, t, c, Flintshire	1 0	0	1 1/4
12000 Perran Wheel Alfred, c	0 2	0	1 1/4
10000 Pioneer, t, c, Wales	0 0	0	1 1/4
3000 Polcrebo, t, c, Crown	0 5	0	—
10000 Polrore, t, c, Cornwall	1 0	0	1 1/4
10000 Port Nigel, t, c, Carnarvonshire	2 0	0	1 1/4
6000 Prince Royal, t, c, s, t, St. Agnes	1 0	8	—
12000 Prince of Wales, c, s, Calstock	0 15	0	1 1/4
15000 Royalton, t, c, St. Columb	1 0	0	1 1/4
35000 Russell United, t, c, Tavistock	0 15	8	1 1/4
30000 Silver Hill, t, c, Callington	1 0	0	1 1/4
50000 Sinclair, t, c, b, Whitford	1 0	0	1 1/4
40000 Sorbridge, t, c, Horrabridge	1 0	0	1 1/4
6000 South Carbis, t, c, Redruth	0 10	0	2 1/4
35000 So. Devon Unit, t, c, Buckfastleigh	1 0	0	1 1/4
5000 South Dolcoath, t, c, Illogan	0 14	0	1 1/4
6000 South Penruthral, t, c, Gwennap	2 7	8	1 1/4
6000 South Tolcarne, t, c, Camborne	4 14	0	2 1/4
6000 South W. Devon, t, c, Tavistock	1 0	0	1 1/4
2043 South Wheel Crofty, t, Illogan	2 9	8	11
40000 Tamar, t, c, Beaulston	0 10	0	1 1/4
130000 Tankerville City Consols, t, St. Aust.	0 15	0	1 1/4
6000 Teasdale, t, c, Durham (prof.)	1 0	0	1 1/4
20000 Tin Hill, t, c, St. Stephens	1 0	0	1 1/4
6000 Tregemo, t, c, Cornwall	3 0	0	4 1/4
100000 Tresavean, t, c, Gwennap	1 0	0	1 1/4
8500 Trevaunance, t, c, St. Agnes	0 2	0	2 1/4
12000 Trecroft Consols, t, c, Gwennap	0 5	0	2 1/4
10000 Un Van & Glynn, t, c, Gwennap (prof. sh)	1 0	0	1 1/4
1000 Vaughan, t, c, Cardiganshire	10 0	0	1 1/4
5000 Victor, t, c, Cilcen, Flintshire	10 0	0	—
2000 Violet Seton, c, Camborne	12 0	0	20
15000 Vincent, t, c, Altarnun	1 0	0	—
20000 Walkham United, t, c, Tavistock	1 0	0	1 1/4
12000 West Assheton, t, c, Carnarvon	1 0	0	1 1/4
12000 West Caradon, t, c, Cleer	0 7	3	1 1/4
3000 West Cran Moor, t, c, Pateley Bridge	10 0	0	—
12000 West Creedy, t, c, Tavistock	0 6	0	1 1/4
10240 West Devon Consols, c, Calstock	1 0	0	1 1/4
10000 West Godolphin, t, c, Breage	0 0	2	1 1/4
6000 West Killy, t, c, St. Agnes	0 12	0	10 1/2
20000 West Lisburne, t, c, Cardigan	1 0	0	11 1/2
3000 West Mary Ann, t, c, Menheniot	1 13	0	1 1/4
20000 W. Pateley Bridge, t, c, Yorkshire	1 0	0	1 1/4
6000 West Polbrean, t, c, St. Agnes	0 5	8	1 1/4
5190 West Poldice, St. Day	6 0	0	5
2048 West W. Devon, t, c, Illogan	32 3	0	9
32000 West Wheal Peever, t, c, Redruth	3 0	8	12 1/2
12000 West Wye Valley, t, c, Montgomery	15 10	0	12 1/2
6000 Wheel Agar, c, Illogan	15 10	0	18
6144 Wheel Basset, c, Illogan	6 17	0	9
1000 Wheel Boys, t, c, Redruth	0 16	0	2 1/4
3000 Wheel Coates, t, c, St. Agnes	0 2	0	1 1/4
2585 W. Comf., & No. Tres, t, c, Gwennap	2 2	0	—
50000 Wheel Elizabeth, t, c, Cornwall	1 0	0	—
5000 W. Fortrose, t, c, s, t, Harrowbarrow	1 0	0	—
12000 Wheel Gale, t, c, St. Hilary	1 16	8	1 1/4
12000 Wheel Jewell, c, St. Hilary	1 0	0	2 1/4
20000 Wh. Honey and Trelawny, t, c, Liske	0 1	0	1 1/4
12000 Wheel Luskay, t, c, Callington	0 1	0	1 1/4
2000 Wheel Owles, t, c, St. Just	7 3	0	10 1/2
6000 Wh. Prussia, & Cardew, t, c, Rdith	2 0	0	—
6000 Wheel Sisters, t, c, Lelant	3 10	0	1 1/4
4096 Wheel Uny, t, c, Redruth	16 19	6	3 1/4
5000 Yorkshire, t, c	1 0	0	—
4000 Yateish, t, c, Cardigan	1 0	0	1 1/4